

STRIKE BACK
at **STROKE**

Most people who have a stroke remain alive—a large number for many years. Today there are about 2 million people in the United States who have had a stroke—and many who are disabled because of it.

Doctors have found that with proper care most stroke patients can be helped to walk again and to take care of themselves. While patients in good hospitals get this kind of care, many people who have a stroke are not taken to a hospital but are cared for at home. In addition, people who have received treatment at the hospital but are not yet fully recovered need continued care.

This booklet has been prepared to help the doctor show what can be done for the stroke patient at home to help prevent or keep to a minimum the disability that often develops after a stroke. Pictures and text show how to fix the bed for the patient, how to place the patient in bed, what to do if the patient cannot speak, and the exercises that can be used in helping to treat the patient. The instructions tell how those caring for the stroke patient can help him and how the patient can help himself.

The doctor should prescribe the exercises that should be done and when to do them. No exercise should be attempted without specific instructions from the doctor.

STRIKE

This pamphlet has been reviewed and endorsed by The American Medical Association

- Committee on Aging
- Committee on Rehabilitation
- Council on Medical Service

PUBLIC HEALTH SERVICE PUBLICATION NO. 596



FOR

NAME OF PATIENT

M. D.

BACK *at* STROKE

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

Bureau of State Services

Division of Special Health Services

Chronic Disease Program

CONTENTS

What Is A Stroke.....	1
What Can Be Done.....	1
What You Can Do to Help the Patient.....	2
If the Patient Cannot Speak.....	3
The Patient's Bed.....	3
Position of the Patient in Bed.....	4
Exercise.....	8
Part I—Exercises You Must Do for the Patient.....	8
Part II—Exercises the Patient Should Do.....	22
Getting Up and Walking.....	31

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Critical, technical review of the content of this pamphlet was provided by the Special Consultants to the Chronic Disease Program: Michael M. Dacso, M.D., Director, Department of Physical Medicine and Rehabilitation, Goldwater Memorial Hospital, New York, N.Y.; Murray B. Ferderber, M.D., Consultant in Physical Medicine to the Allegheny County Institutional District, Pittsburgh, Pa.; Frank H. Krusen, M.D., Head, Department of Physical Medicine and Rehabilitation, Mayo Clinic, Rochester, Minn., and Chairman, Committee on Rehabilitation, American Medical Association; Philip R. Lee, M.D., Palo Alto Medical Clinic, Palo Alto, Calif.; Fred Simonton, M.D., Chickamauga, Ga., Vice-President, American Academy of General Practice, and Chairman, Georgia State Board of Health; Frederick C. Swartz, M.D., Lansing, Mich., Committee on Aging, American Medical Association.

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WHAT IS A STROKE

A stroke is the result of damage to a part of the brain. This damage takes place if:

- a blood vessel (artery) in the brain breaks and blood escapes, or
 - a clot of blood blocks an artery in the brain.
- These are the main causes of a stroke.

Usually the part of the brain that is damaged controls the

muscles that move the arm, hand and the fingers, and the leg, foot and toes on one side of the body. After a stroke, the patient may not be able to move the fingers, hand, arm, and parts of the leg on one side of the body. Sometimes the part of the brain that controls the ability to speak is affected—and sometimes, as with any sick person, the patient may not be able to think clearly.

WHAT CAN BE DONE

Much can be done at home to help the person who has had a stroke—even if he cannot be taken to a hospital. There is also need for treatment after the stroke patient comes home from the hospital. The doctor may arrange for a nurse or a physical therapist to come in to care for the patient and show the family what can be done and how to do it.

In addition to the usual medical and nursing care that sick people need, there are some special things that must be done as soon as possible to:

- prevent the wasting of the patient's muscles,
- prevent further crippling of the paralyzed hand, arm, foot, and leg, and
- help the patient recover as much use of his hand, arm, foot, and leg as possible—and as soon as possible.

Usually, the muscles that *bend* the fingers, wrist, elbow, knee, and hip are stronger than the muscles that straighten these parts of the body. After a stroke the muscles that *straighten* the fingers, the wrist, the elbow, the knee, and the hip are weakened. For this reason, the stronger muscles that bend these parts of the body pull the fingers, wrist, elbow, knee, and hip into a "bent" position and keep them that way. Unless something is done about this as soon as possible, the joints and the muscles become stiff so that they cannot be moved and the patient usually becomes crippled for the rest of his life.

This is why it is important to do everything possible to prevent crippling.

WHAT YOU CAN DO TO HELP THE PATIENT

The pictures in this booklet will show you:

- how to fix the bed for a person who has had a stroke,
- how to place the patient in the bed, and
- the exercise treatments for the patient.

But before you do anything —be sure you understand:

- what you need to do,
- how to do it,
- when to start to do it, and
- when to stop doing it.

If you are not sure about something that the doctor, nurse, or physical therapist tells you to do—ask one of them to show you how and watch you do it—to make sure you do it right.

Do not start the Exercises for the Patient until the Doctor has ordered them

You or other members of the family who are going to help care for the patient will find the following booklets useful.

- Red Cross Home Nursing Textbook

You can get a copy of this book through your local American Red Cross Chapter. The price is 75 cents a copy. In many places, local chapters of the Amer-

ican Red Cross give courses in home nursing. You may want to check this with your local chapter.

- Home Health Emergencies. A Guide to Home Nursing and First Aid in Family Health Emergencies.

This booklet can be obtained free by writing to:
Medical Department
The Equitable Life Assurance Society
of the United States
393 Seventh Avenue
New York 1, N. Y.

- Cerebral Vascular Disease and Strokes

This booklet can be obtained free by writing to:
Heart Information Center
National Heart Institute
Bethesda 14, Md.
Ask for: Public Health Service Publication No. 513.

- Good News for Stroke Victims

This booklet can be ordered by sending 25 cents to:
Public Affairs Pamphlets
22 East 38 St.
New York 16, N. Y.
Ask for: Public Affairs Pamphlet No. 259

IF THE PATIENT CANNOT SPEAK

Many patients are not able to speak after a stroke. Sometimes even if the patient can speak, the words are so mixed up that it is hard to understand what the patient is trying to say. This may get the patient upset and worried. You can help the patient in several ways.

Tell the patient that his trouble with speaking does not mean that he is losing his mind. Patients often get over this trouble after a while. Even if they cannot talk, most patients can hear and understand what you say when you talk to them.

Make up some signals with the patient so he can tell you what he wants or needs. For example: to close one eye, if he wants water; to open his mouth, if he wants food. If the patient is able to write, get him to write what he wants.

The doctor will tell you about any special speech therapy he may want for the patient.

A book that you and the patient may find helpful is:

- Aphasia Rehabilitation—Manual and Work Book by Martha L. Taylor and Morton Marks.

The price is \$3.00. It can be ordered by writing to:
Institute of Physical Medicine and Rehabilitation
New York University—Bellevue Medical Center
400 East 34 St.
New York 16, N. Y.

THE PATIENT'S BED

You will find it easier to take care of the patient who has had a stroke and the patient will be more comfortable if:

- the bed is high enough so you do not have to bend over it too much while you work with the patient,
- the bed is of the single or twin size (not a double bed),
- the mattress is firm,
- the springs do not sag.

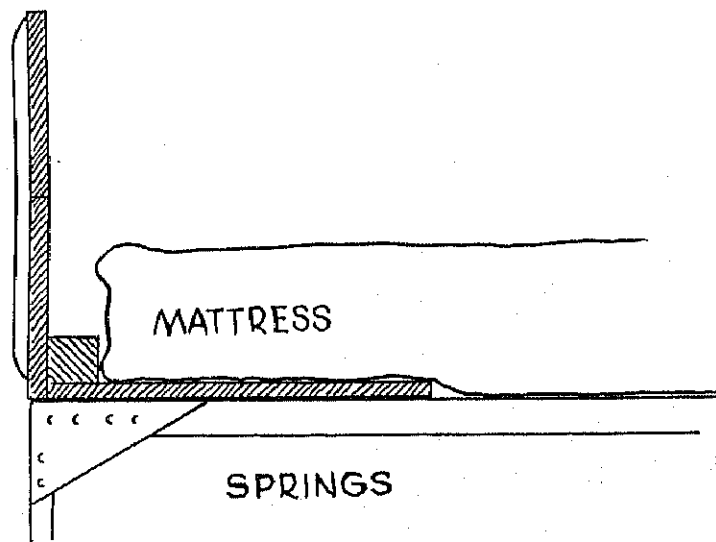
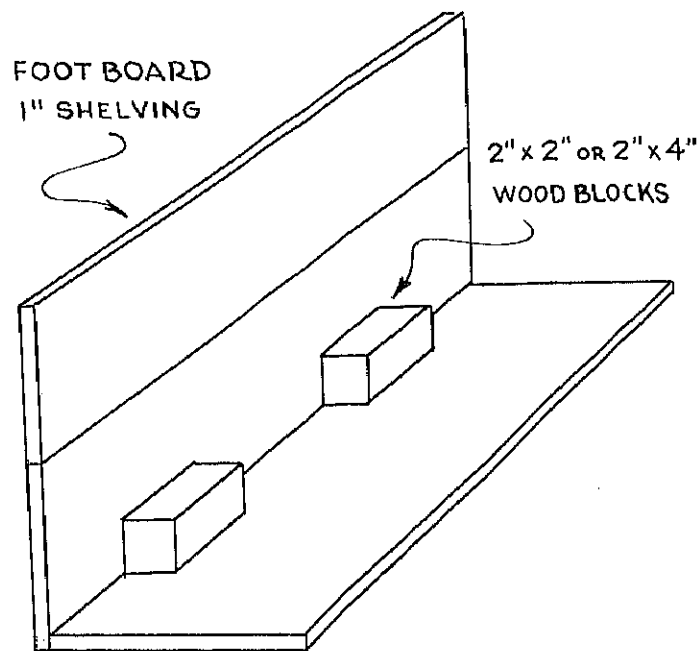
There are a few things that can be done to improve the bed you do have.

To make the bed higher:

- take the casters from the legs, and
- place a cinder block, concrete block, or piece of wood of the proper height under each leg of the bed so that the top of the mattress is 30 or 32 inches above the floor.

The bed should be made lower again when the patient is well enough to get out of it.

If the mattress is not firm enough, the patient will not be comfortable. To make the mattress firmer, place a piece of $\frac{3}{8}$ -inch thick plywood or $\frac{3}{8}$ -inch thick cardboard about 30 inches wide and 60 inches long under the mattress and on top of the bed spring.



POSITION OF THE PATIENT IN BED

Study the pictures that show how to place the patient in bed. It is important that you learn the right way. *Unless the Patient is kept in the right position, He may become more crippled.*

There are a few things that you must be sure about:

- Be sure that there is a board for the feet—and that the feet rest against it **SO THAT THE TOES POINT STRAIGHT UP.**
—You can see from the picture how to place the board on the bed—

When the patient is lying on his back:

- Be sure to keep the paralyzed leg from rolling over to one side. Roll up a large bath towel or a light cotton blanket. Push it up against the side of the thigh and leg on the paralyzed side so that the toes are pointing up and the leg is straight. Look at the picture to see how to do this.
- Place a pillow under the paralyzed arm. Fix it so that the pillow rests against the side of the patient. The patient's arm should be placed on the pillow so that the arm is kept away from the body. A rolled napkin or small towel should be placed under the hand to keep the fingers from closing and making a "fist."
- Be sure that the patient's body lies in a straight line.

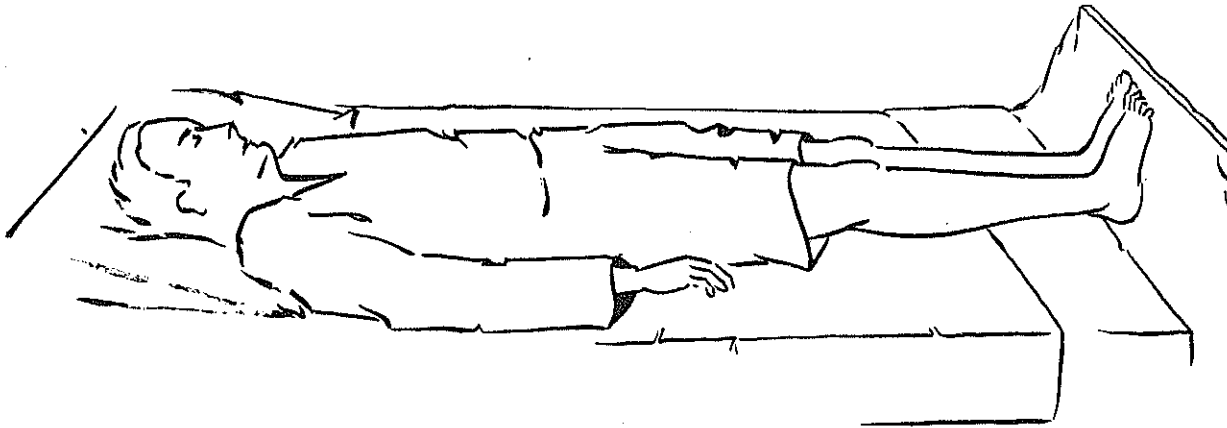
To keep the patient comfortable and to help prevent bed sores, it is important to change the position of the patient in bed from time to time. The pictures show some of the other positions that you can use for the patient.

The doctor will tell you how often to do this. As the patient gets better, the doctor may allow him to move around in bed more and more.

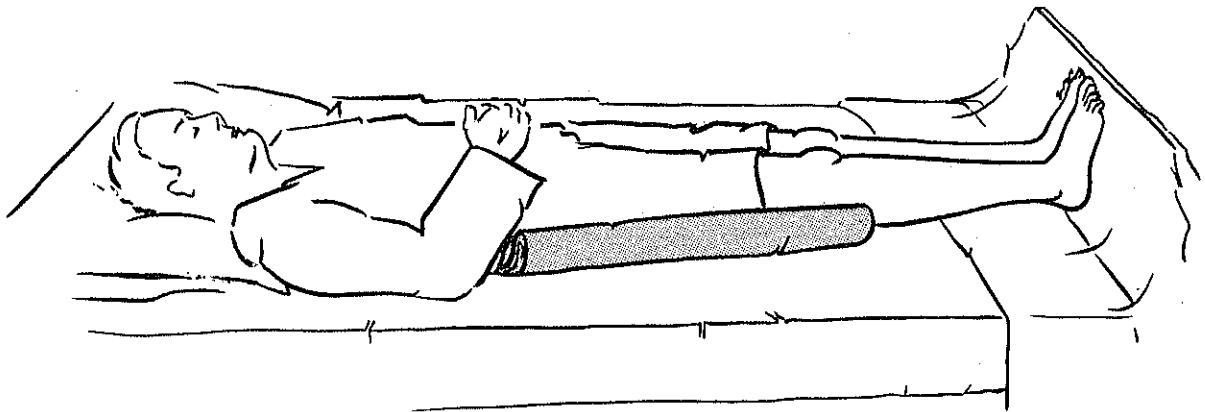
The pictures on this page show how the patient should be placed in bed.

This is the first step. Make sure the:

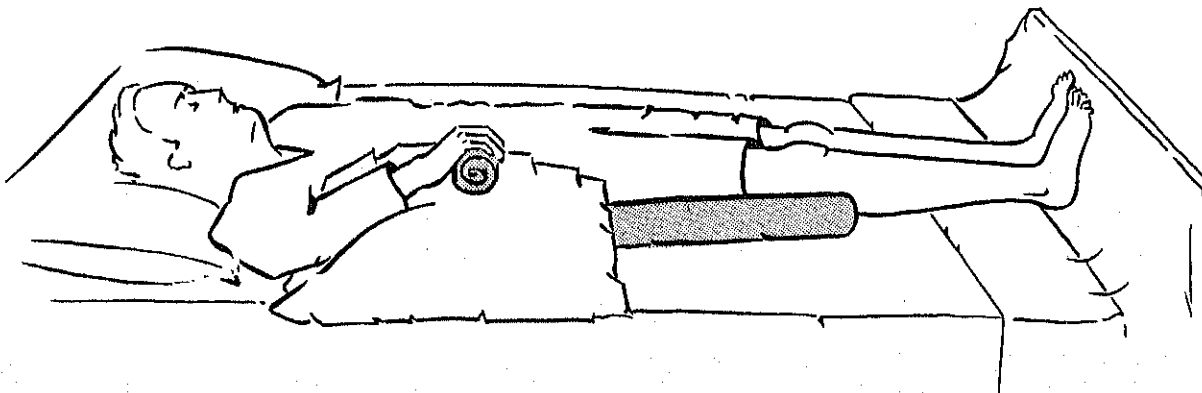
- patient is lying straight,
- head and neck are not bent forward (use only a flat pillow under the head and shoulders),
- shoulders are level,
- hips are level,
- feet are braced against a foot board and the toes point straight up, and
- heels of the feet rest over the space between the mattress and the foot board.

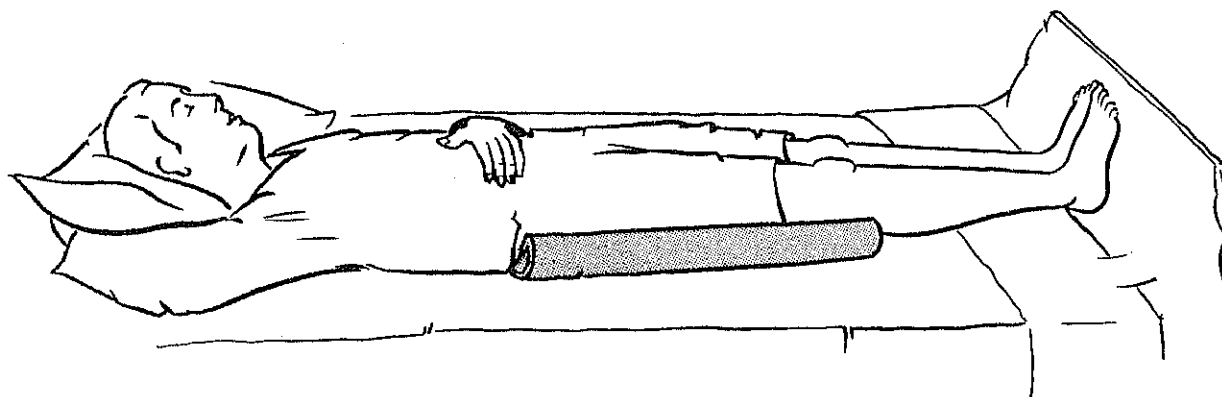


This is the second step. A rolled bath towel or light cotton blanket is tucked in against the weak leg. The roll should be pushed about 2 inches under the leg. This will keep the roll in place and the leg from rolling over to one side.



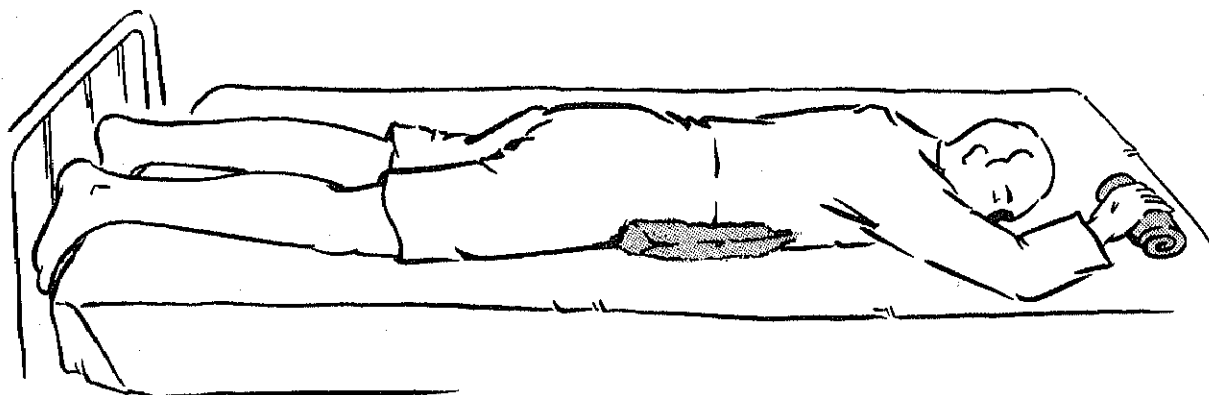
In the last step, a pillow is placed next to the body on the weak side. The weak arm is placed on the pillow. Make sure that the elbow points away from the body and that the lower arm and hand are placed alongside the body and about 12 inches away from it. A rolled napkin or small towel is placed under the weak hand to keep the fingers open.



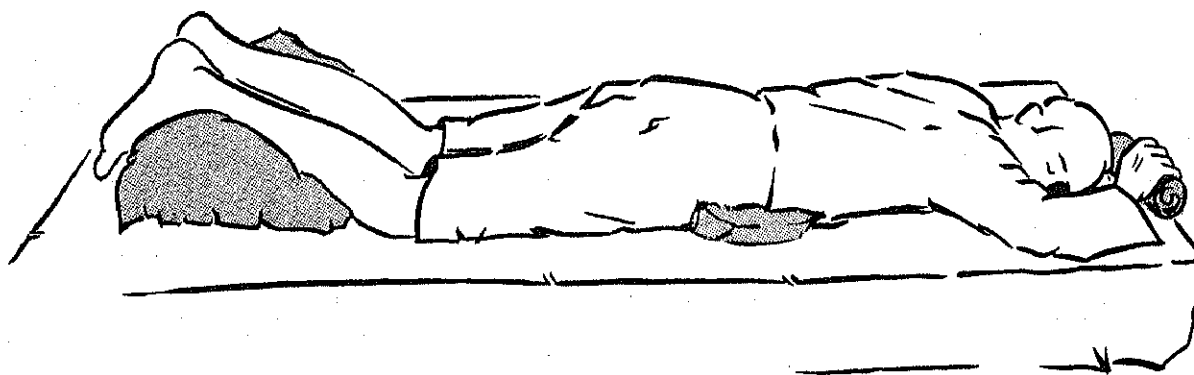


The pictures on this and the next page show some of the other positions that can be used. Changing the patient's position in bed helps to keep him comfortable and to prevent bed sores.

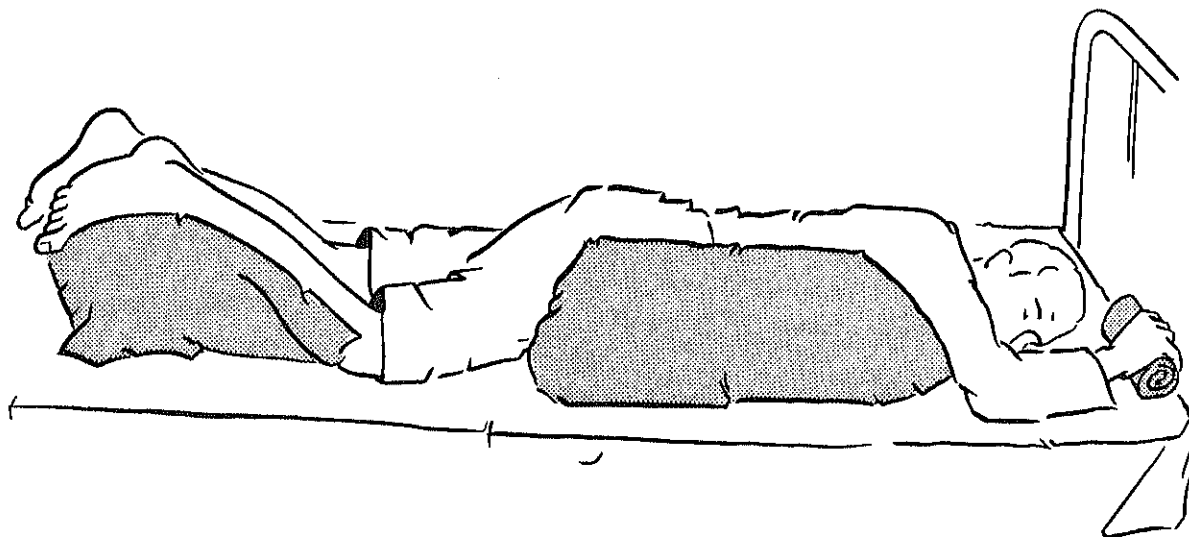
1. The patient's weak hand is tucked under the pillow with the fingers open.



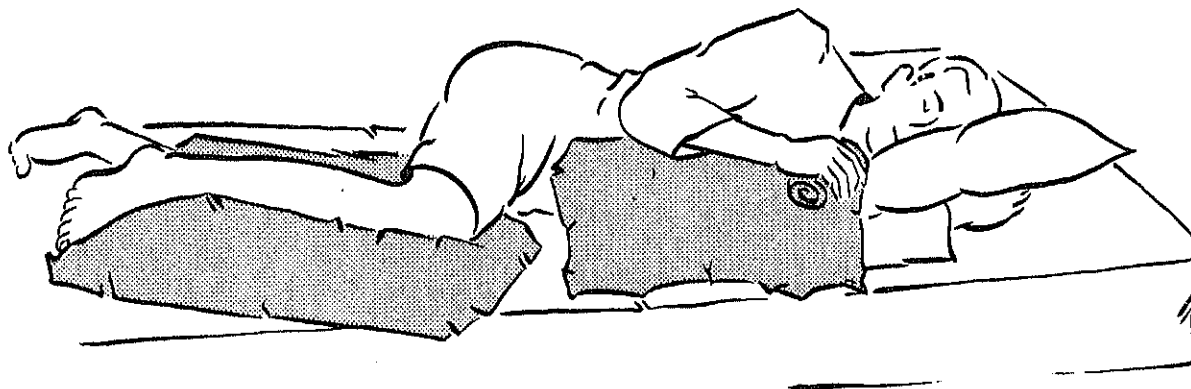
2. A flat pillow is placed under the patient's middle to make him more comfortable. Be sure that the toes hang over the end of the mattress.



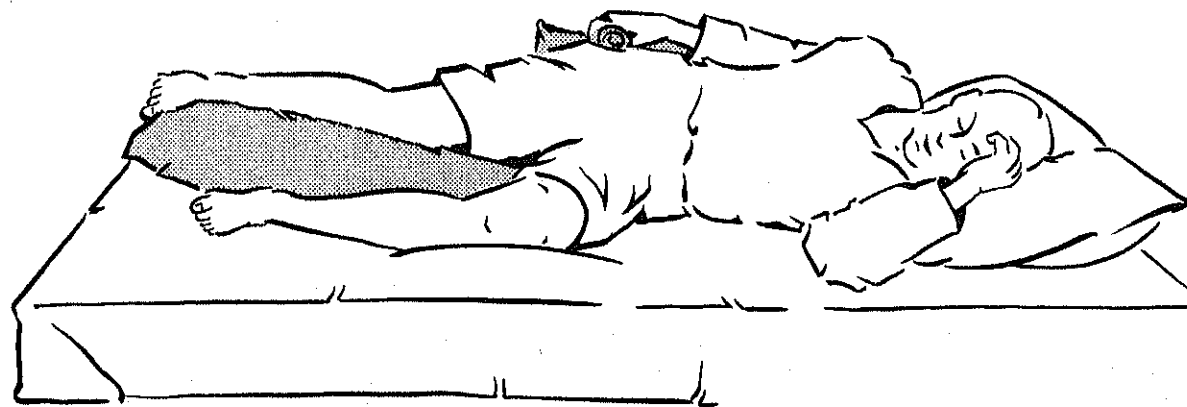
3. When it is not possible for the patient's toes to hang over the end of the mattress, a large pillow can be used to support the feet so that the toes do not touch the mattress.



4. A pillow tucked under the weak side of the body helps the patient lie on his good side. Another pillow under the patient's legs keeps them in a comfortable position.



5. In this side-lying position, a pillow is used to support the weak arm. Another pillow is used to support the weak leg.



6. Here is one more side-lying position. The weak arm is placed on a pillow right behind the patient. Notice the rolled towel under the hand.

EXERCISE

The doctor will tell you when the patient is ready for exercise. This exercise is treatment that will help to:

- keep the patient's muscles from wasting and becoming weak, and
- keep the joints in the feet, legs, hips, hands, and arms from getting stiff.

You will find that each page of exercises has a space at the bottom where the doctor may write:

- the date that he wants to start the exercise,
- the number of times to do the exercise, and
- how often to repeat the exercise each day.

When you look at the pictures of the exercises, you will see that there are two kinds:

- those that you must do for the patient, and
- those that the patient can do himself.

PART I

EXERCISES YOU MUST DO FOR THE PATIENT

When you are helping the patient with the exercises, be careful to:

- be gentle so that you do not injure the patient,
- not force any part of the body to move,
- check each move by looking at the pictures—until you can remember the right way, and
- work slowly.

Each exercise for the arms and legs should be done the same number of times on BOTH SIDES of the body to keep the muscles on the good side from becoming weak.

EXERCISE 1



STARTING POSITION

Starting position: Place one hand above the patient's elbow. Hold the patient's hand with your other hand.

Step 1. Lift the patient's arm up from the side of the body.

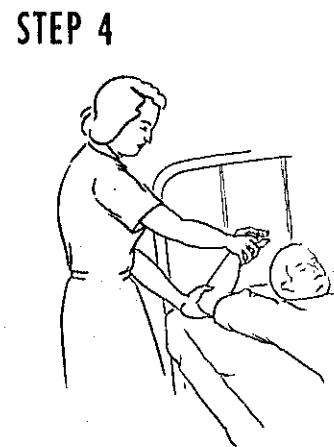
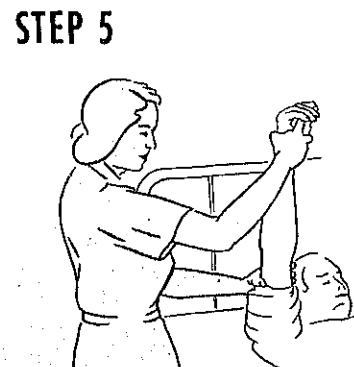
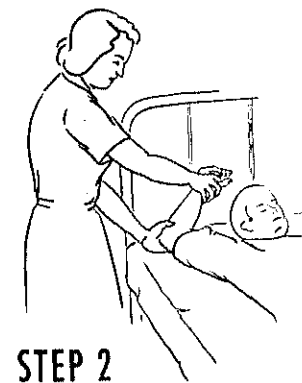
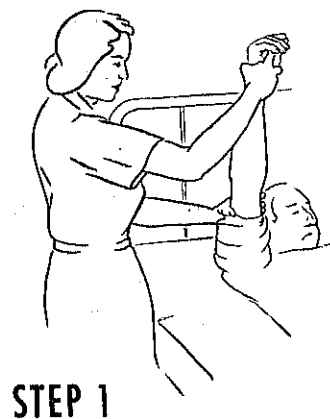
Step 2. Carry the arm slowly and gently toward the patient's head as far as it will go without hurting the patient.

Step 3. The arm may be bent at the elbow if the head board of the bed will not permit the arm to be carried all the way back.

Steps 4, 5. Carry the arm back to the starting position and repeat the exercise.

As you learn the different exercises you will be able to do the steps one after the other without stopping between them.

Also, make sure that you do this exercise and the others with the good hand or leg as well as with the weak one.



Rx

BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

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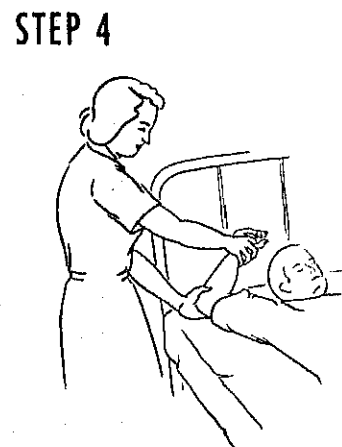
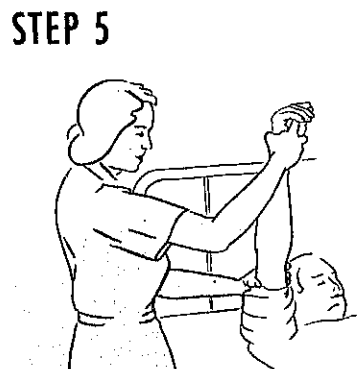
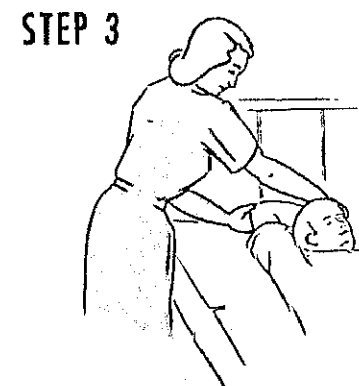
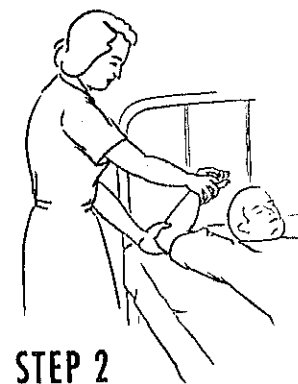
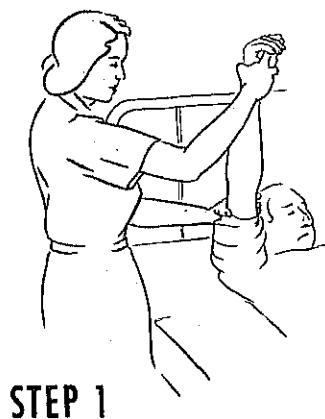
Step 2. Carry the arm slowly and gently toward the patient's head as far as it will go without hurting the patient.

Step 3. The arm may be bent at the elbow if the head board of the bed will not permit the arm to be carried all the way back.

Steps 4, 5. Carry the arm back to the starting position and repeat the exercise.

As you learn the different exercises you will be able to do the steps one after the other without stopping between them.

Also, make sure that you do this exercise and the others with the good hand or leg as well as with the weak one.

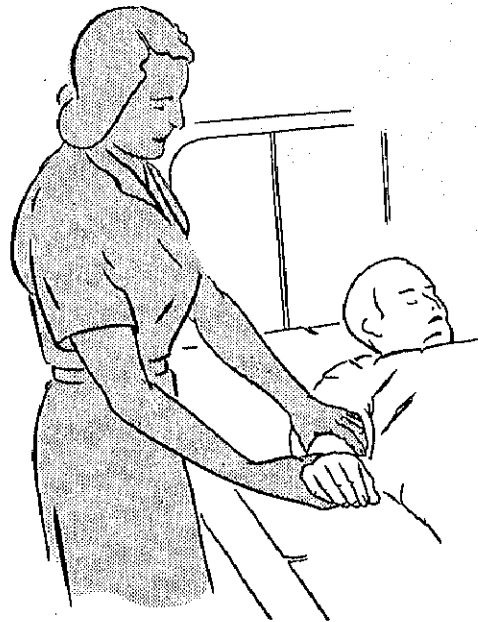


R_x

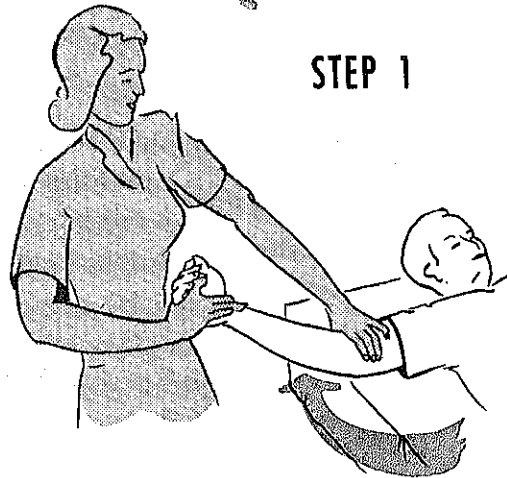
BEGIN ON _____ DATE _____

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

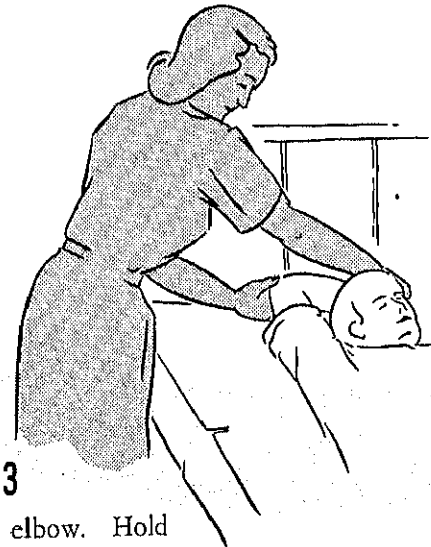
EXERCISE 2



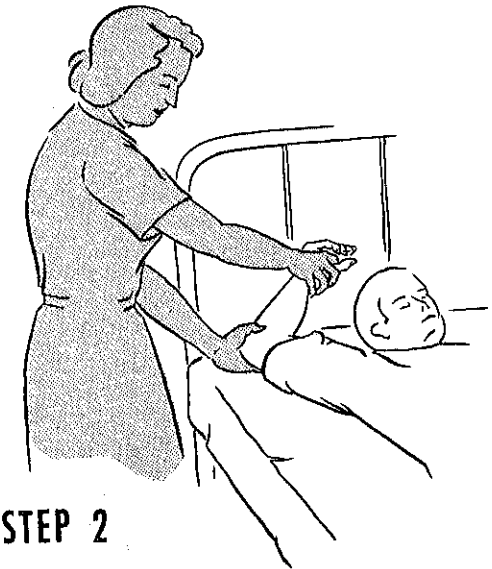
STARTING POSITION



STEP 1



STEP 3



STEP 2

Starting position: Place one hand above the patient's elbow. Hold the patient's hand with your other hand.

Step 1. Keep the patient's arm straight and move it away from the body.

Steps 2, 3. Move the arm slowly around toward the head as far as it will go without hurting the patient. Return the arm to the starting position. Repeat.

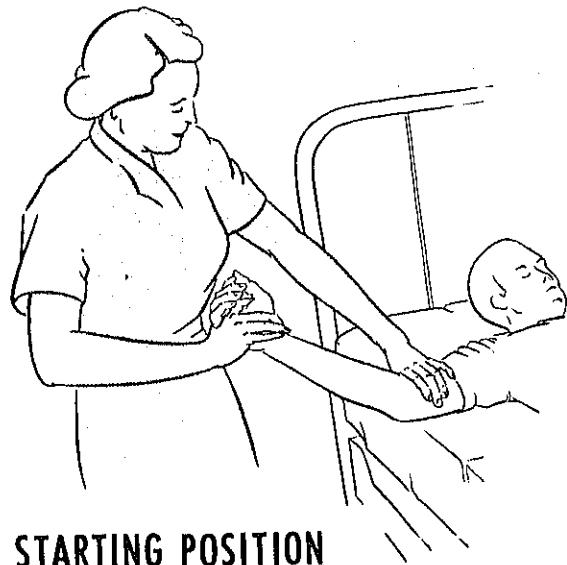
Don't forget to do this with the good arm as well as with the weak one.

Rx

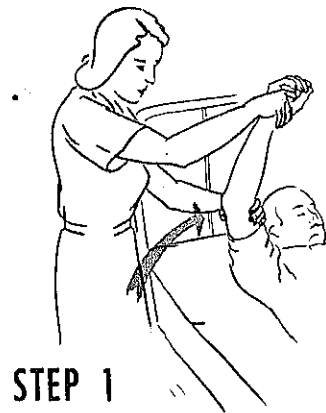
BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

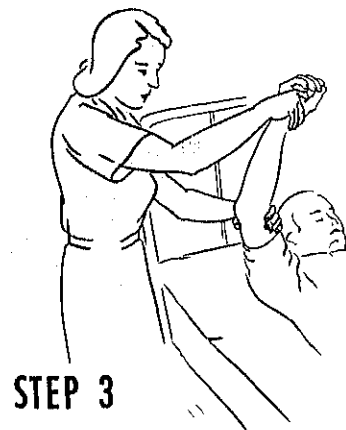
EXERCISE 3



STARTING POSITION



STEP 1



STEP 3



STEP 2

Starting position: Place one hand on patient's arm above the elbow.
Hold the patient's hand with your other hand.

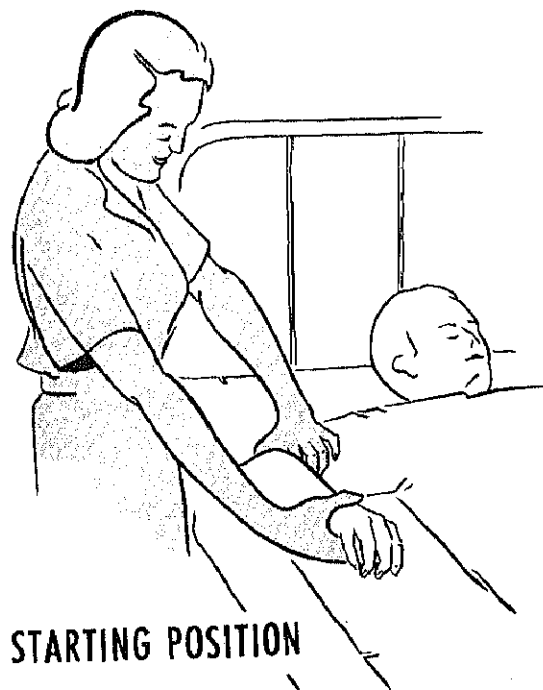
Steps 1, 2. Lift arm and carry it across the patient's chest.
Step 3. Return arm to the starting position and repeat.

R_x

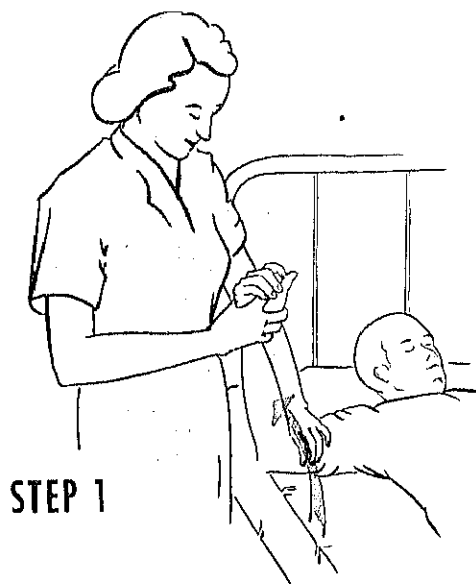
BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 4



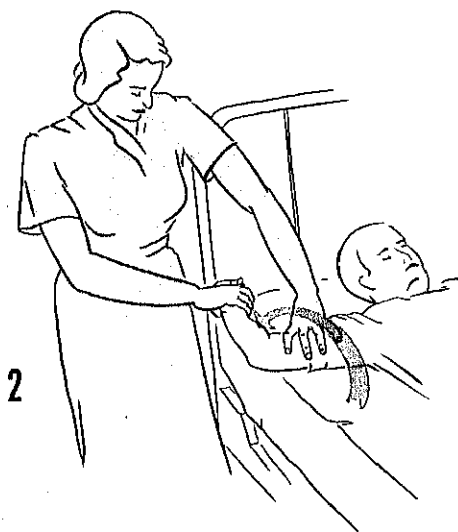
STARTING POSITION



STEP 1



STEP 3



STEP 2

Starting position: Place the arm with the elbow bent and pointed away from the body. Hold the upper arm against the mattress.

Step 1. Lift the lower arm and hand.

Step 2. Move the lower arm and hand slowly and gently back toward the head as far as you can without hurting the patient. Keep holding the upper arm in place against the mattress.

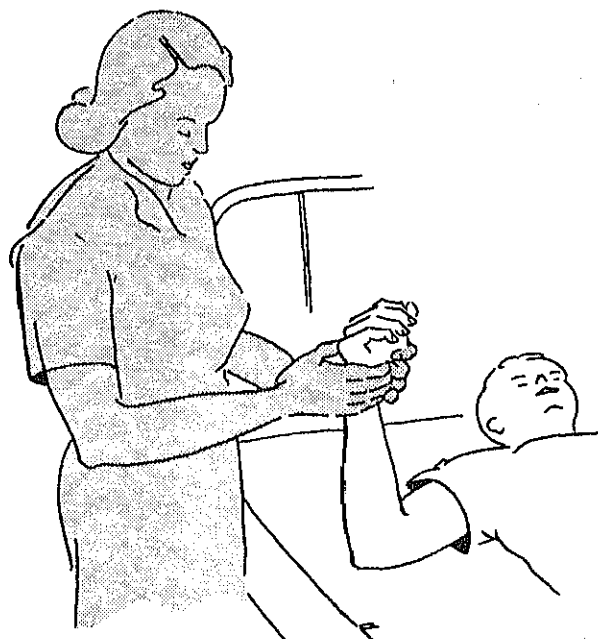
Step 3. Return arm to the starting position and repeat.

Rx

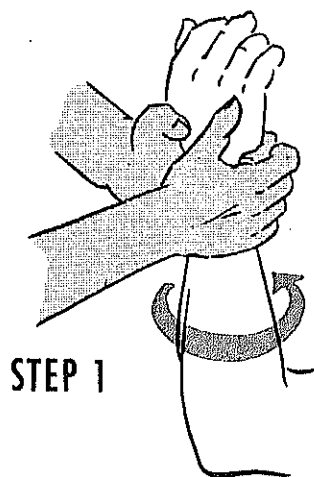
BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

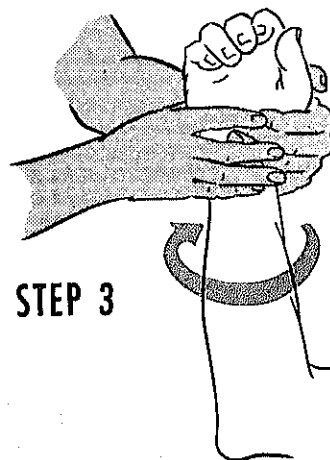
EXERCISE 5



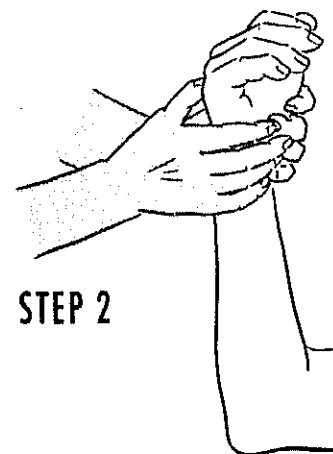
STARTING POSITION



STEP 1



STEP 3



STEP 2

Starting position: Hold the patient's hand as in the picture.

Step 1. Twist the palm of the hand toward the patient's face.

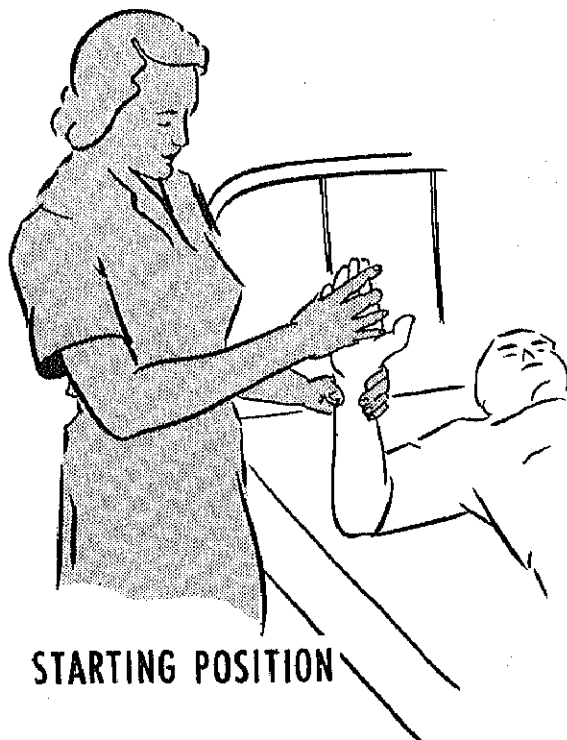
Steps 2, 3. Twist the palm of the hand back toward the patient's feet and repeat.

R_x

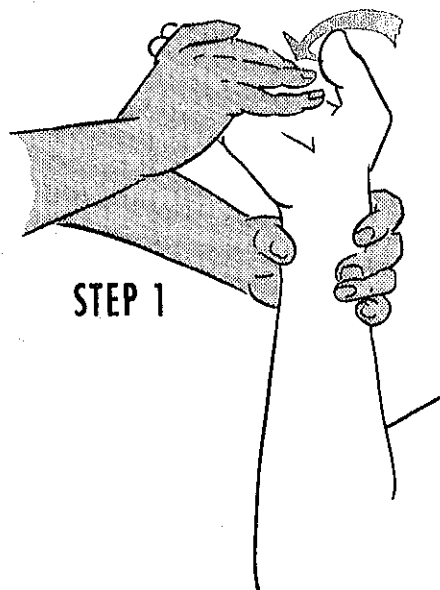
BEGIN ON _____ DATE _____

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

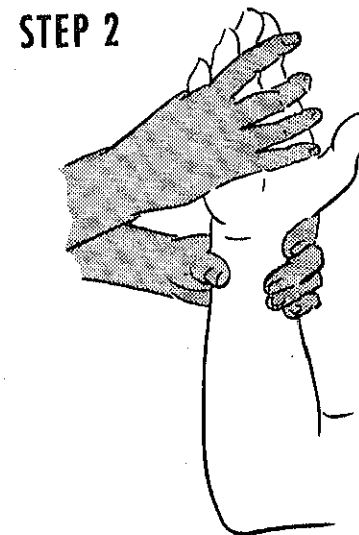
EXERCISE 6



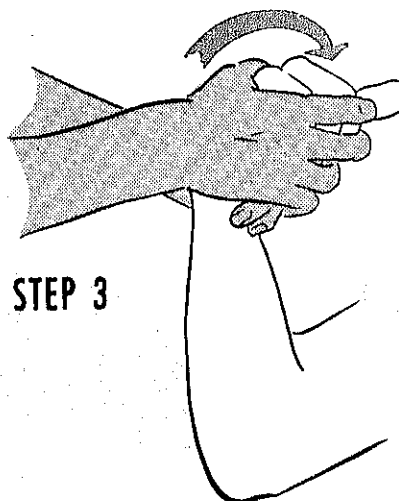
STARTING POSITION



STEP 1



STEP 2



STEP 3

Starting position: Hold the patient's wrist with one hand and the patient's hand with your other hand.

Step 1. Keep the fingers of the patient's hand straight. Bend the hand backward.

Step 2. Straighten the hand.

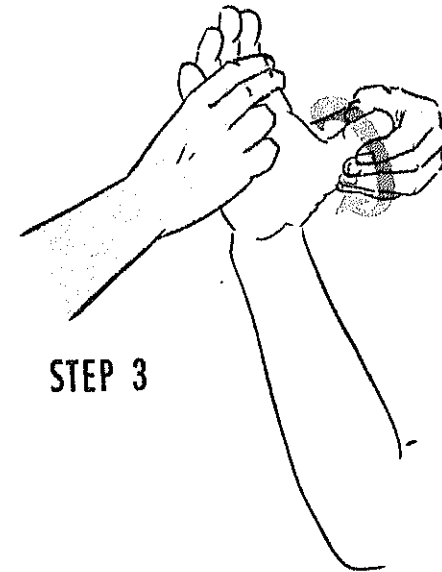
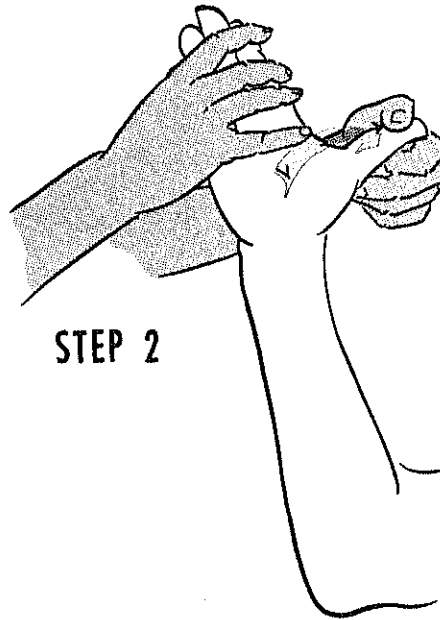
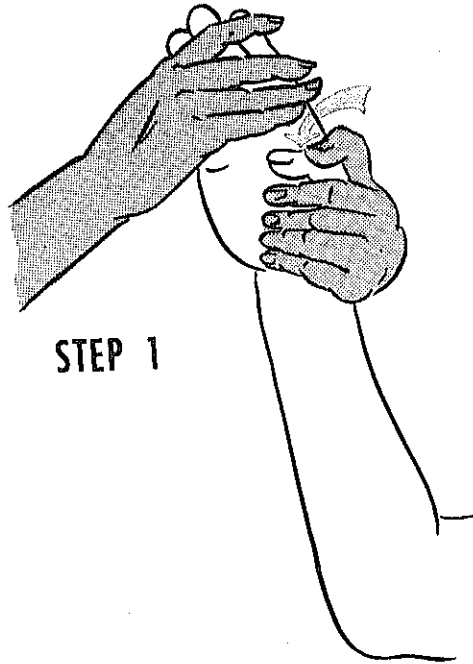
Step 3. Now bend the hand forward, closing the fingers to make a fist. Open the hand and repeat the exercise.

Rx

BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 7



Step 1. Hold the patient's fingers straight with one hand. With your other hand bend the patient's thumb into the palm of his hand.

Step 2. Pull the thumb back so that it points away from the hand and repeat the exercise.

Step 3. Move the thumb in a circle.

Don't forget to do all these exercises with the good hand as well as with the weak one.

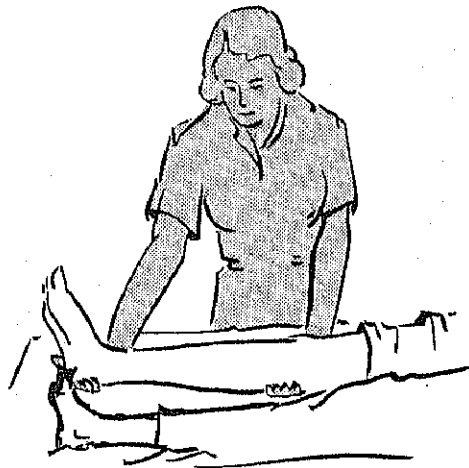
Rx

BEGIN ON _____

DATE

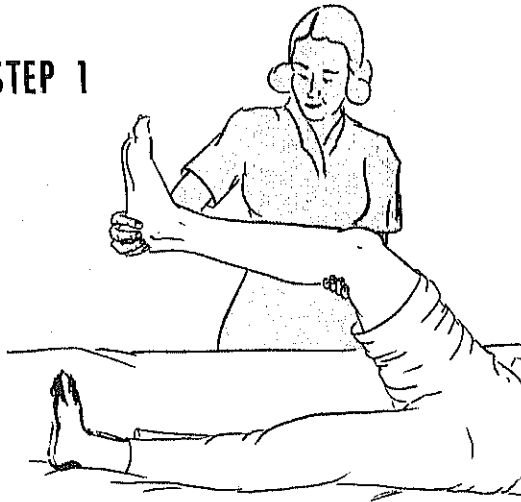
DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 8

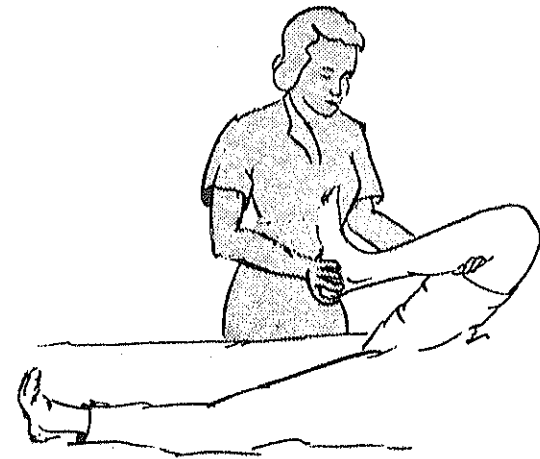
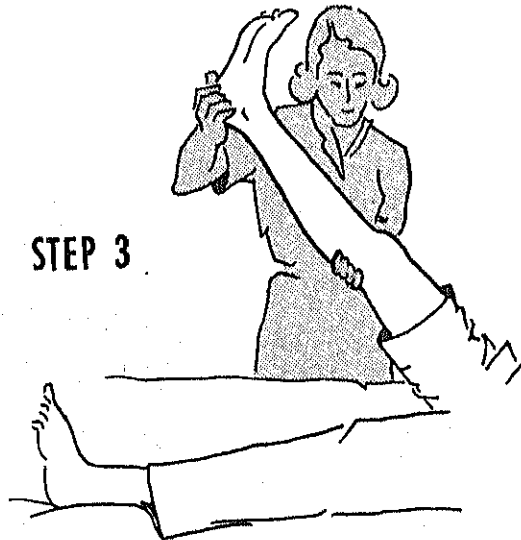


STARTING POSITION

STEP 1



STEP 3



STEP 2

Starting position: Place one hand under the patient's knee and your other hand on the heel of the foot.

Step 1. Lift the leg. Bend it at the knee.

Step 2. Move the leg slowly back toward the patient's head as far as it will go without hurting the patient.

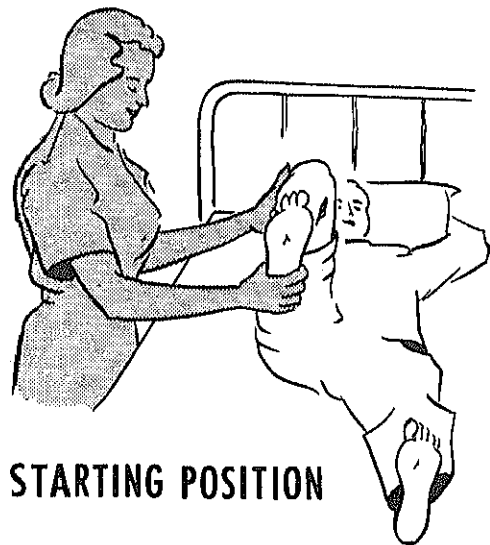
Step 3. Straighten the knee by lifting the foot upward. Lower the leg to the starting position and repeat the exercise.

Rx

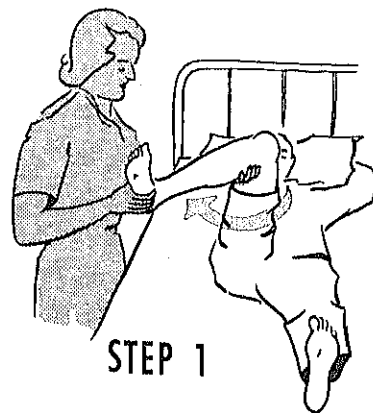
BEGIN ON DATE

DO THIS EXERCISE TIMES EVERY HOUR(S)

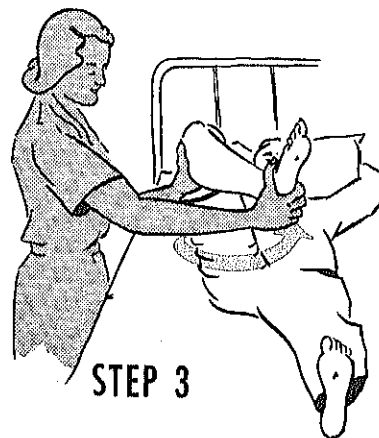
EXERCISE 9



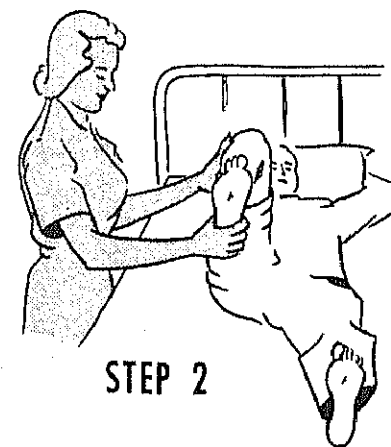
STARTING POSITION



STEP 1



STEP 3



STEP 2

Starting position: Place one hand under the patient's knee, and your other hand on the heel of the foot. Lift the leg and bend it to a right angle at the knee.

Step 1. Hold the knee in place and pull the foot toward you.

Step 2. Move the foot back to the starting position.

Step 3. Push the foot away from you. Move the foot back to the starting position and repeat the exercise.

Don't forget to do these exercises with the good leg as well as with the weak one.

R_x

BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 10



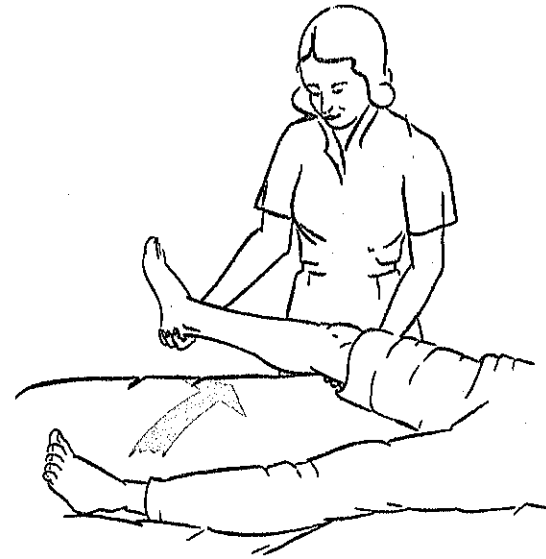
STARTING POSITION

Starting position: Place one hand under the patient's knee and your other hand under the heel. Hold the leg straight and lift it about 2 inches off the mattress.

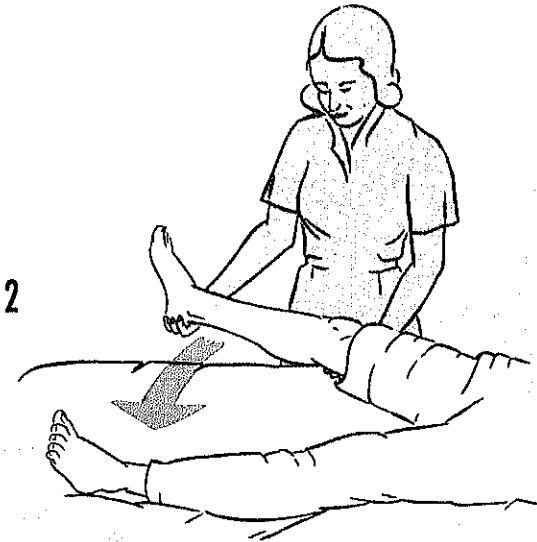
Step 1. Pull the leg toward you.

Step 2. Push the leg back to the starting position and repeat the exercise.

STEP 1



STEP 2



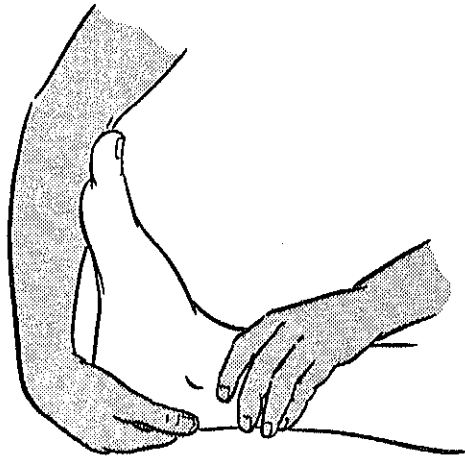
Rx

BEGIN ON DATE

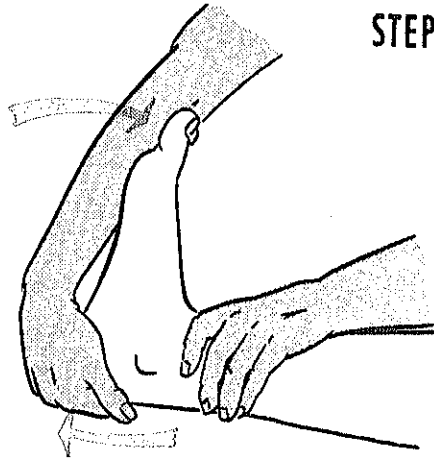
DO THIS EXERCISE TIMES EVERY HOUR(S)

EXERCISE 11

STARTING POSITION



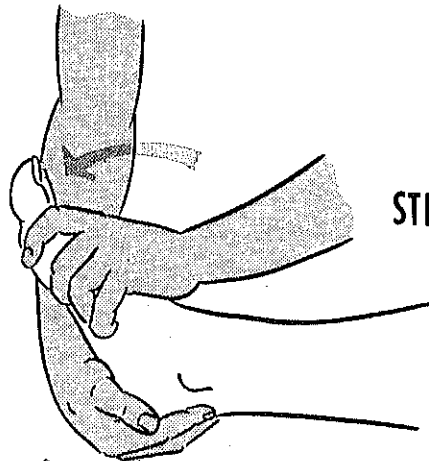
STEP 1



STEP 2



STEP 3



Starting position: Hold the heel of the patient's foot with your hand so that your arm rests against the bottom of the patient's foot. Place your other hand as shown in the picture.

Step 1. Press your arm against the bottom of the foot to move the foot toward the leg. At the same time pull on the heel of the foot as if you were trying to stretch the leg.

Step 2. Move your arm back to the starting position.

Step 3. Slide your hand up on the top of the foot below the toes. Push down on the foot to "point the toes." At the same time push up against the heel. Return to the starting position and repeat the exercise.

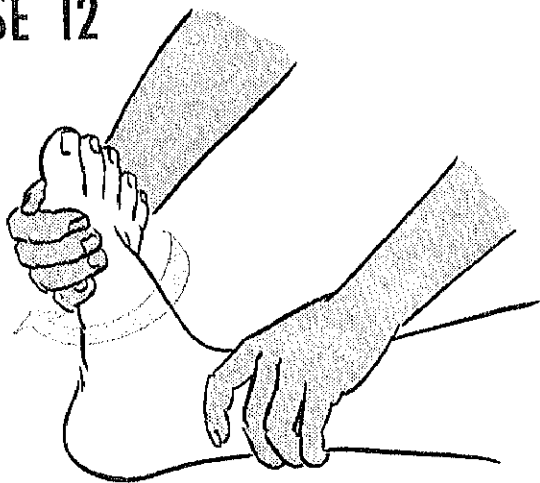
R_x

BEGIN ON _____ DATE _____

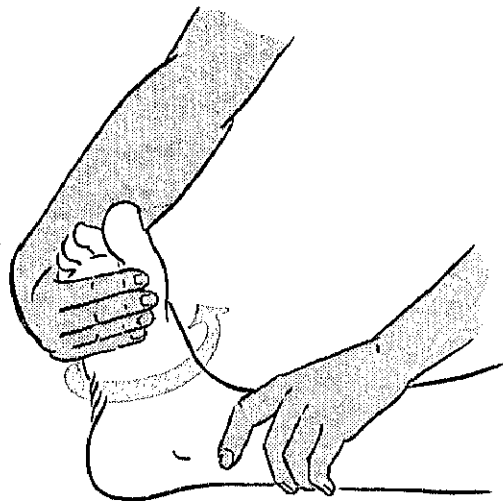
DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 12

STEP 1



STEP 2



EXERCISE 12

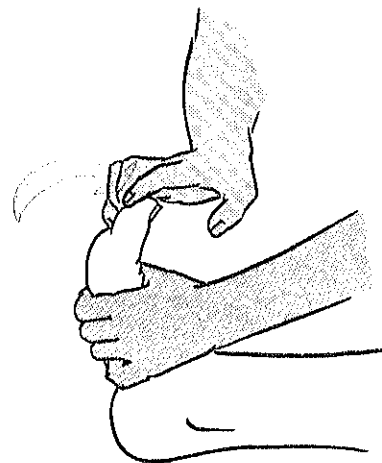
- Step 1. Turn the whole foot outward.
Step 2. Turn the whole foot inward.

EXERCISE 13

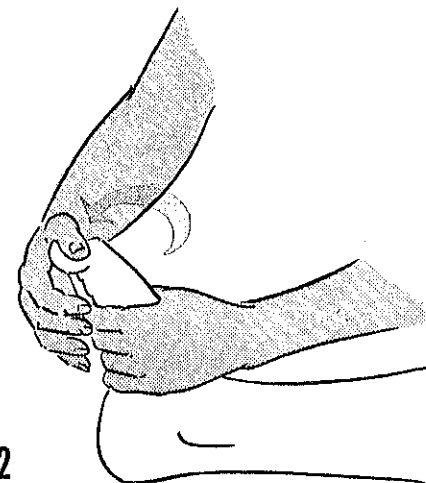
- Step 1. Pull up on the toes.
Step 2. Push down on the toes.

EXERCISE 13

STEP 1



STEP 2



R_x

BEGIN ON

DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)



When the patient is well enough to sit up, a chair can be used as a back rest.

A flat pillow may be placed under the knees for support.

Make sure the feet rest against a foot board.

PART II

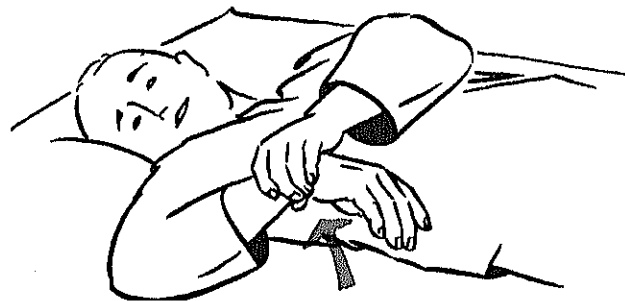
EXERCISES THE PATIENT SHOULD DO

Now that you are well enough you should start doing exercises by yourself. The pictures on the next few pages will show you how. You will see that they are like the ones you have been doing with help. This may not be easy at first. You may need some help. But each day as you get stronger, you should be able to do more yourself.

Make sure you:

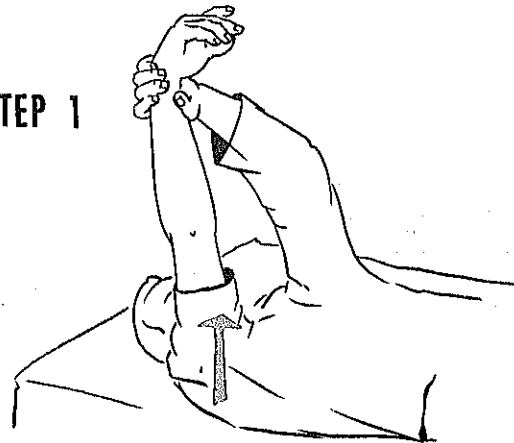
- understand how to do each exercise,
- do each exercise as many times each day as your doctor wants you to, and
- ask your doctor, nurse, or physical therapist to explain anything you do not understand.

EXERCISE 14

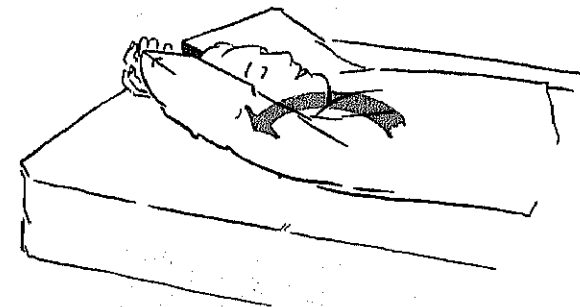


STARTING POSITION

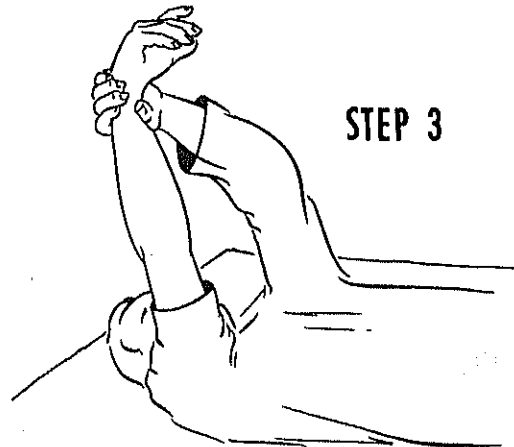
STEP 1



STEP 2



STEP 3



Starting position: Hold the wrist of your weak arm.

Step 1. Lift the hand up.

Step 2. Carry the hand back alongside your head.

Step 3. Lift the hand up and carry it forward to the starting position and repeat the exercise.

Rx

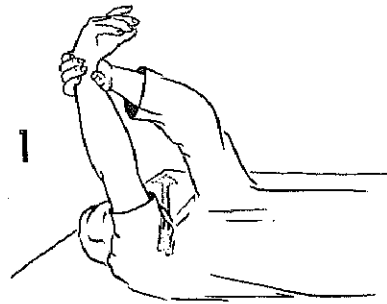
BEGIN ON _____

DATE

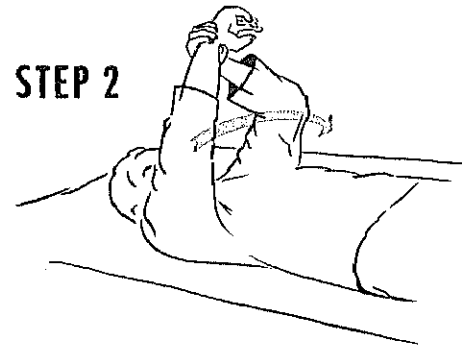
DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 15

STEP 1



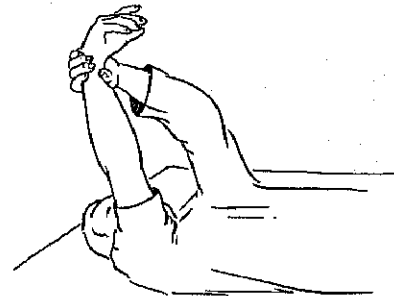
STEP 2



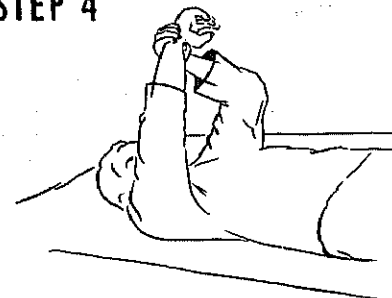
STEP 3



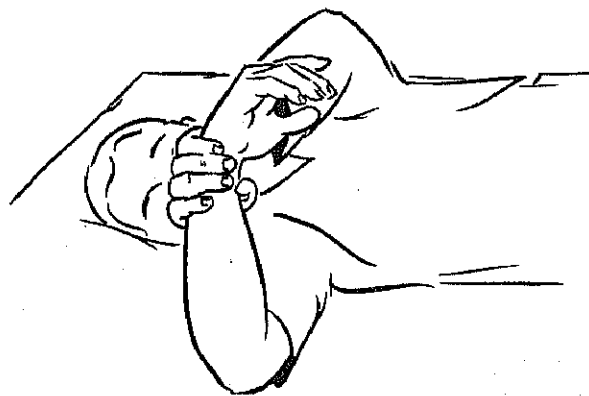
STEP 5



STEP 4



STARTING POSITION



Starting position: Hold the wrist of your weak arm.

Step 1. Lift the weak arm up.

Steps 2, 3. Move the arm across your chest.

Steps 4, 5. Move the arm back again to the starting position and repeat the exercise.

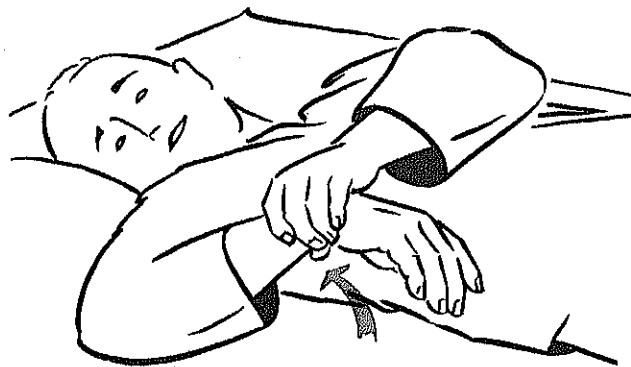
Rx

BEGIN ON _____

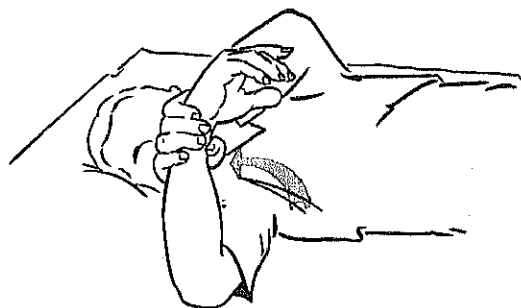
DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

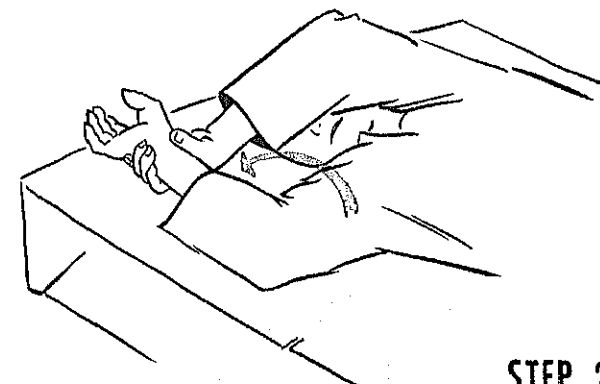
EXERCISE 16



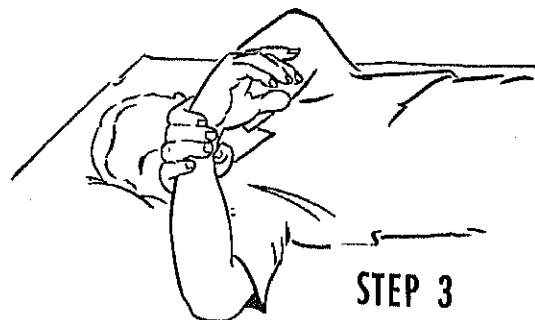
STARTING POSITION



STEP 1



STEP 2



STEP 3

Starting position: Hold wrist of the weak arm.

Step 1. Lift the weak hand up. Keep the upper arm on the mattress.

Step 2. Move the weak hand back alongside the head.

Step 3. Lift the hand back to the starting position and repeat the exercise.

Be sure to keep the upper arm down on the mattress and away from body.

R_x

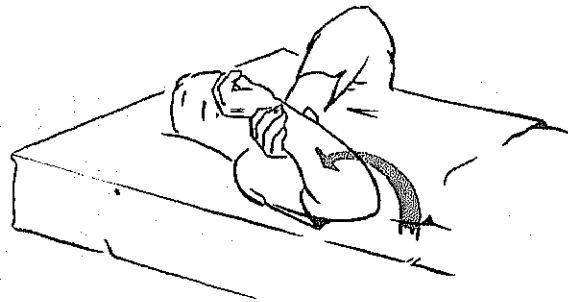
BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

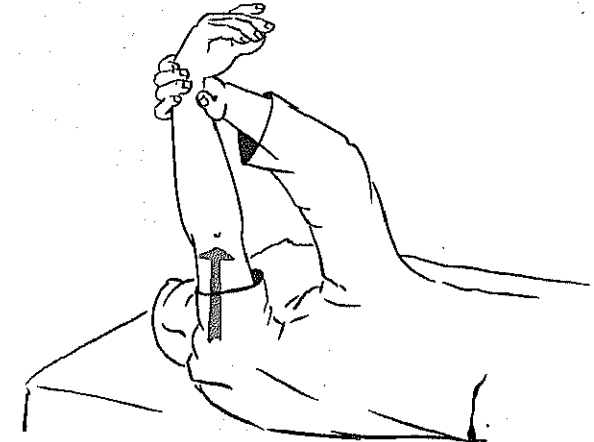
EXERCISE 17



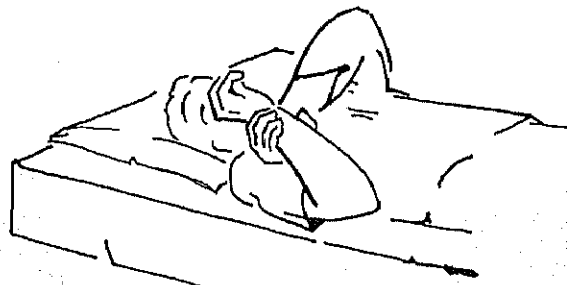
STARTING POSITION



STEP 1



STEP 2



STEP 3

Starting position: Grasp the wrist of your weak hand.

Step 1. Bend elbow until hand is near the shoulder.

Step 2. Pull up weak arm as far as you can until elbow is straight.

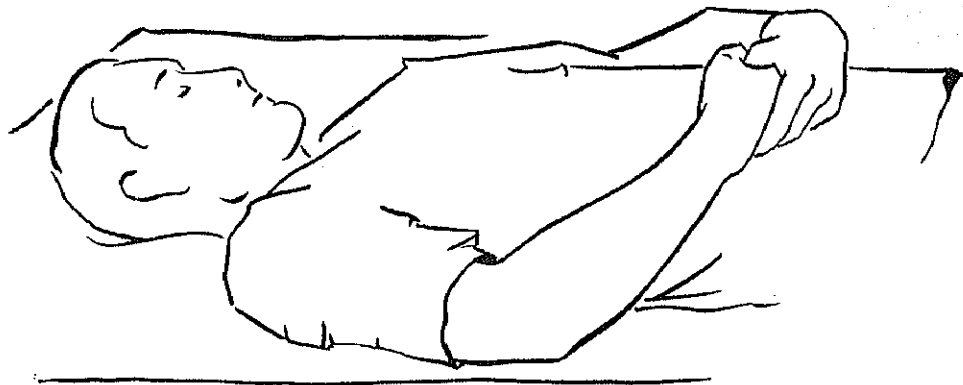
Step 3. Return to starting position and repeat the exercise.

R_x

BEGIN ON _____ DATE _____

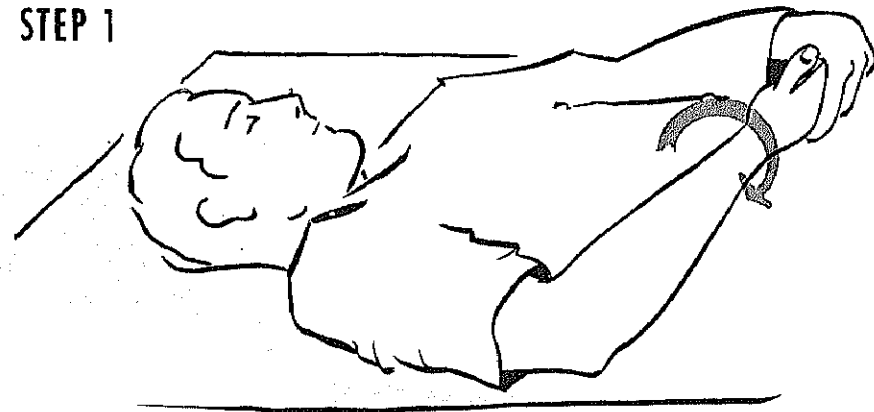
DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 18

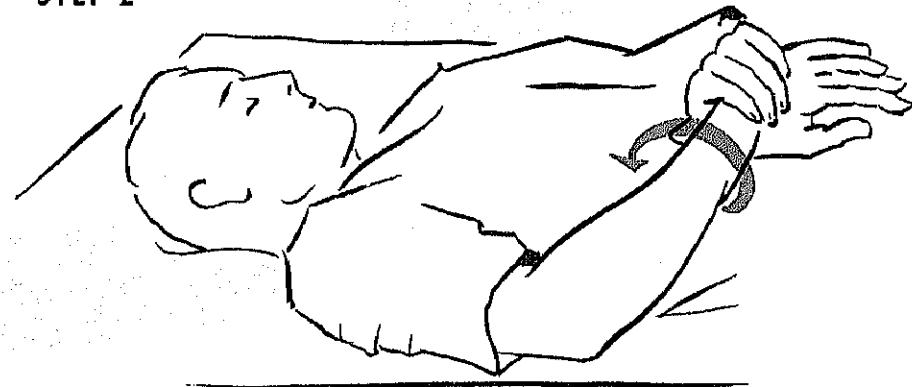


STARTING POSITION

STEP 1



STEP 2



Starting position: Take hold of the weak hand as in the picture.

Step 1. Turn the palm of the weak hand toward your face.

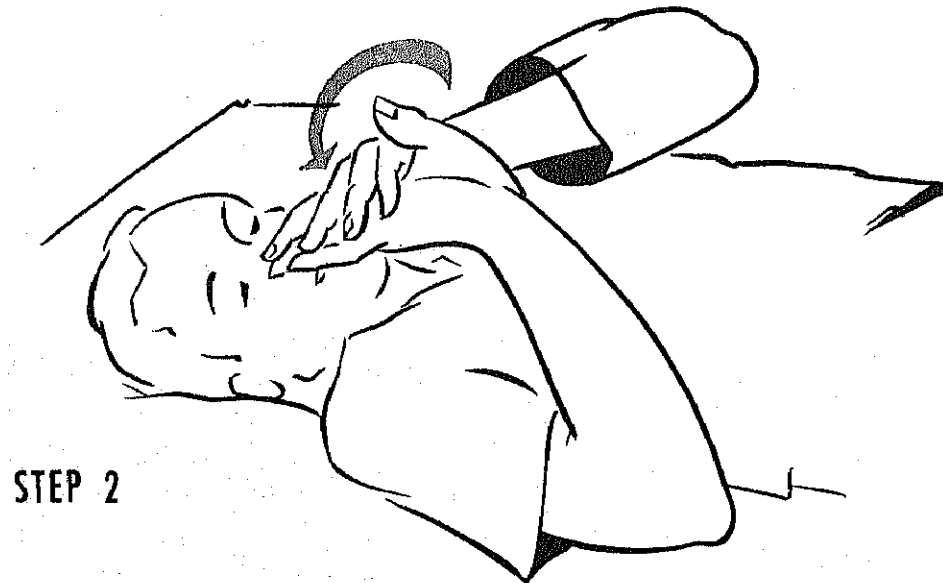
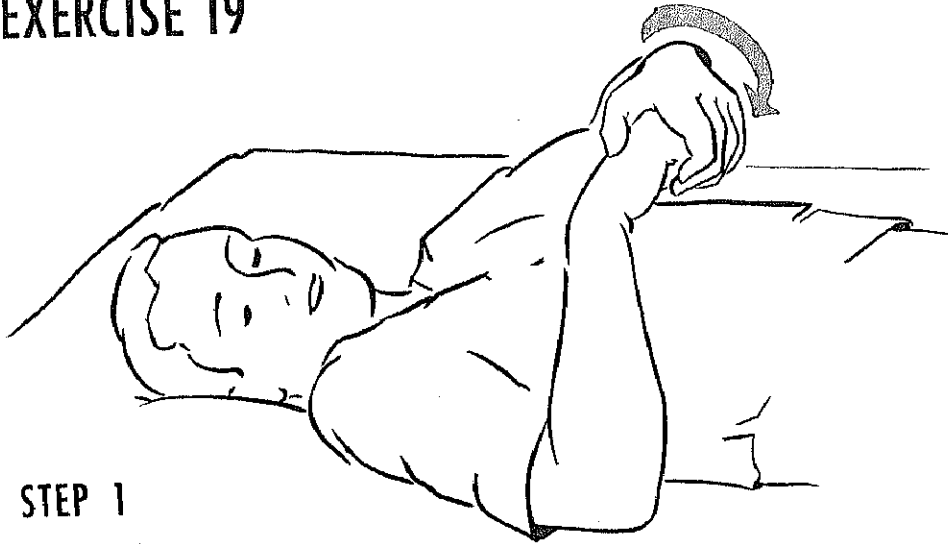
Step 2. Turn the palm of the hand toward your feet and repeat the exercise.

R_x

BEGIN ON _____ DATE

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 19



Step 1. Bend the fingers into the palm. Then bend the hand forward.

Step 2. Open the hand, straighten the fingers, pull the hand back keeping the fingers straight and repeat.

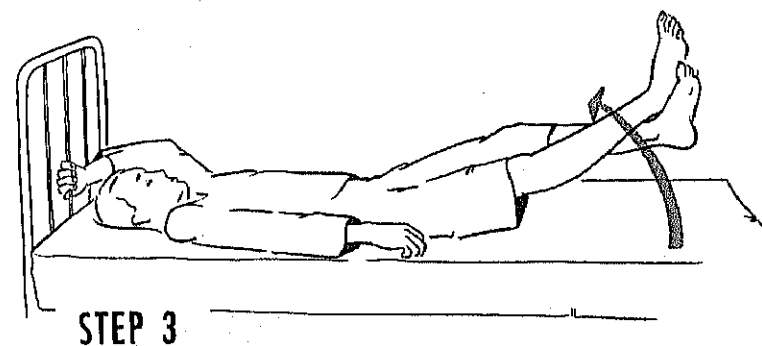
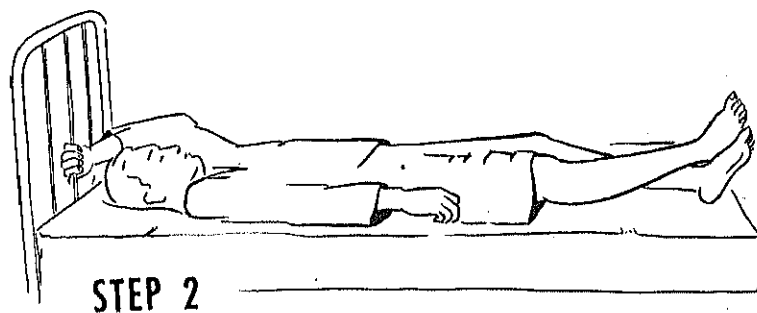
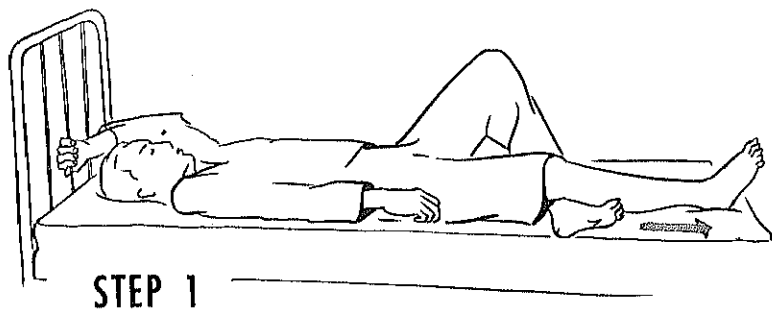
Step 3. Move the thumb in a circle.

R_x

BEGIN ON DATE

DO THIS EXERCISE TIMES EVERY HOUR(S)

EXERCISE 20



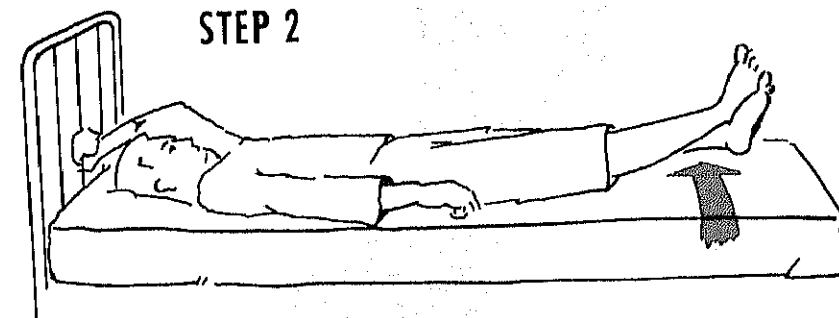
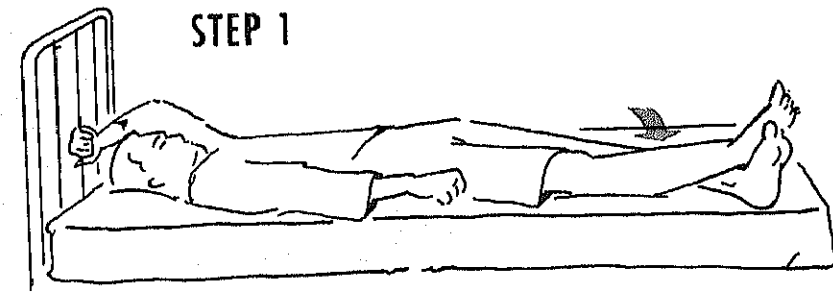
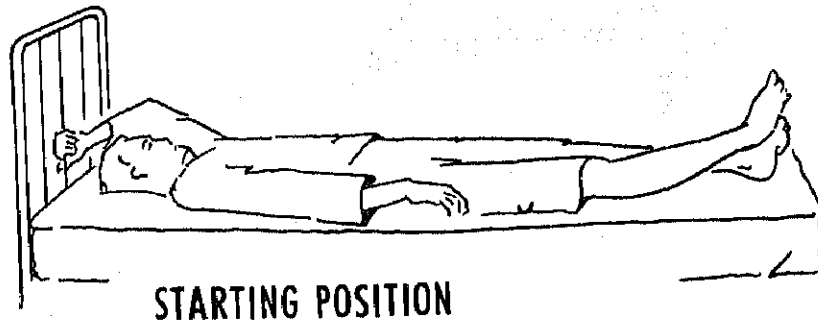
- Step 1. Slide your good foot under the knee of your weak leg.
Step 2. Move your good foot toward the ankle of your weak leg.
Step 3. Lift your weak leg up as high as you can. Then let it down.
Repeat lifting the leg.

R_x

BEGIN ON _____ DATE _____

DO THIS EXERCISE _____ TIMES EVERY _____ HOUR(S)

EXERCISE 21



Starting position: Slide your good foot under the ankle of your weak foot.

Step 1. With your good leg lift your weak leg about 2 inches off the mattress. Carry your weak leg as far as you can to one side.

Step 2. Now carry your weak leg as far as you can to your other side. Return to the starting position and repeat the exercise.

Rx

BEGIN ON DATE

DO THIS EXERCISE TIMES EVERY HOUR(S)

GETTING UP AND WALKING

For some patients getting out of bed and walking will be easy. For others, it may be a harder job. But most people who have a stroke can walk again—if they try—and work hard enough.

The pictures on the next few pages show what you need to do and how to do it. Of course, this does not mean that you do this in one day! At first, you will need someone to help you.

Your doctor will tell you:

- when you may start getting up and out of bed.
- how long you may be up each day.

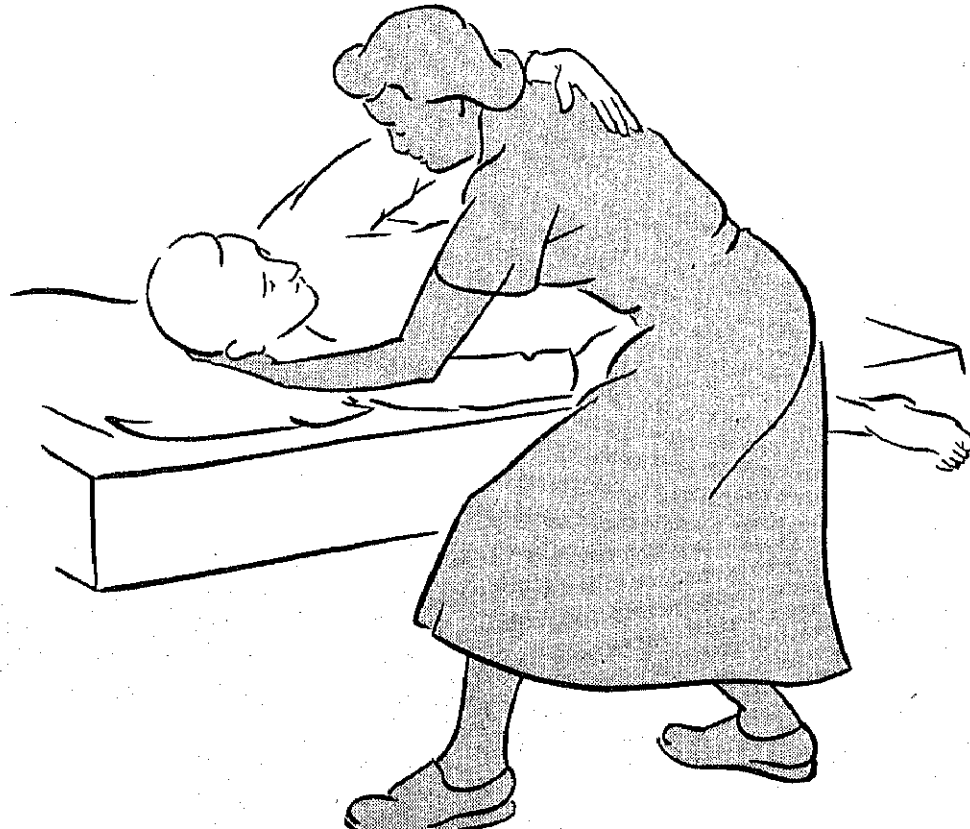
Your doctor also will check your leg and foot to see whether it is strong enough to stand on safely. If not, he will put a splint on it.

GETTING OUT OF BED

Getting out of bed when you are well enough is the next step. You may need some help at first—but you should start doing it yourself as soon as you can. The pictures on this page show how you can be helped when you first try sitting up on the side of the bed.



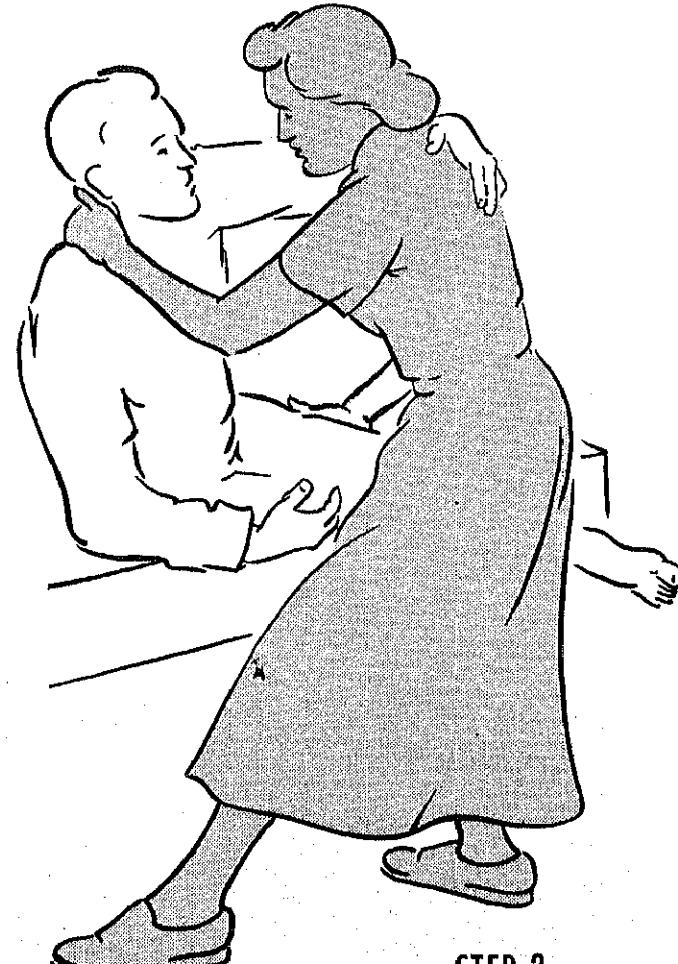
- Step 1. Move yourself so that your weak side is near the edge of the bed. Your helper should keep his or her back straight and bend only at the hips and knees.
- a. The helper puts one hand under your head and neck.
 - b. The helper puts the other hand behind your knees. You put your weak hand at your side and your good hand on your helper's shoulder.



Step 2. Your helper straightens his or her hips and knees, at the same time lifts up your head and neck and pulls your leg over the side of the bed. You can help by pulling yourself up with your good hand on your helper's shoulder.

Sit on the side of the bed with your feet on the floor or on a foot stool.

Practice balance by putting your good hand on the bed to one side and leaning on it. Then put your good hand to the back and lean on it. After you learn to balance yourself using your hand, practice balancing without using your hand.



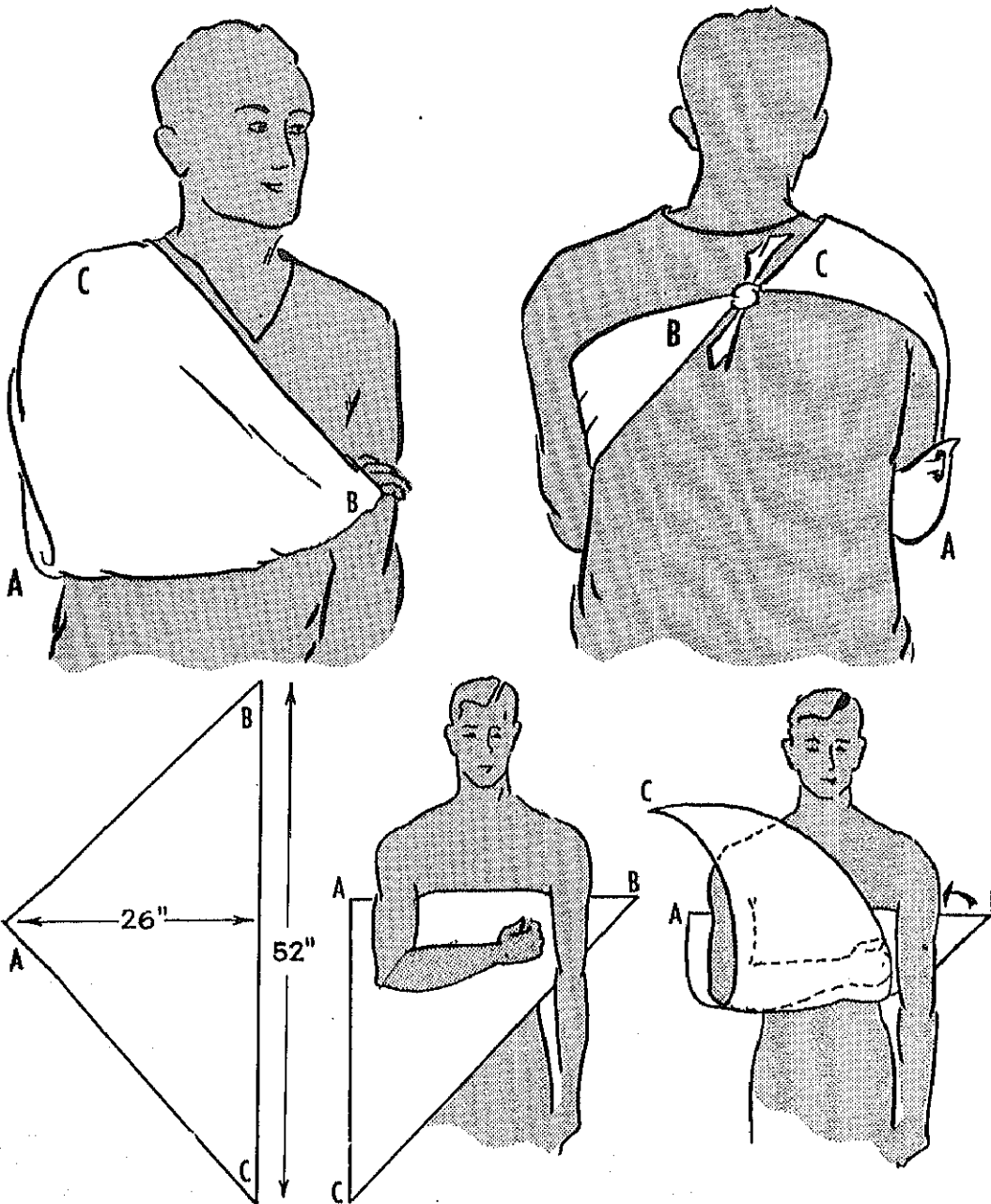
USING A SLING

Your doctor may want you to use a sling if the muscles around your shoulder are weak. A sling will help to keep the weight of the weak arm from pulling at the shoulder when you are sitting or standing.

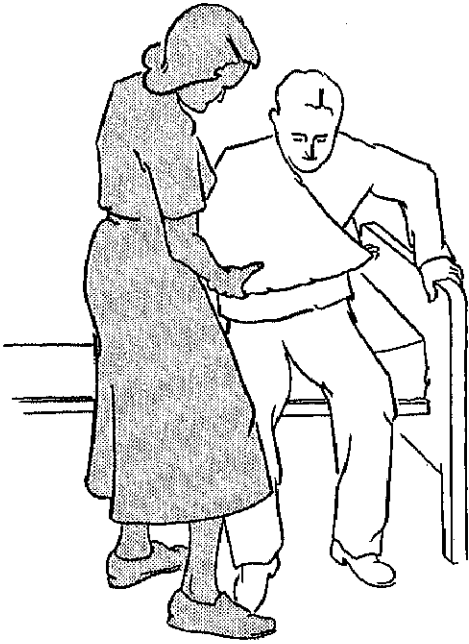
To make a sling:

1. A piece of cotton cloth should be cut in a triangle 52 inches long at the bottom and 26 inches wide (see picture).
2. Hold your weak arm bent up at a little more than a right angle.
3. The cloth sling is placed against your chest so that corners "A" and "B" are on a straight line across your chest at the level of the nipples, and under the weak arm.
4. Corner "C" is placed over the weak arm and shoulder.
5. Corner "B" is carried under the armpit of the good arm and tied to corner "C" in back.
6. Corner "A" is tucked so that the sling fits around the elbow.
7. The sling should be tight enough to help push up at the elbow and keep the arm from pulling at the shoulder.
8. The sling should hold the wrist and hand slightly up.

DO NOT LET THE HAND DROOP OVER THE EDGE OF THE SLING



STANDING

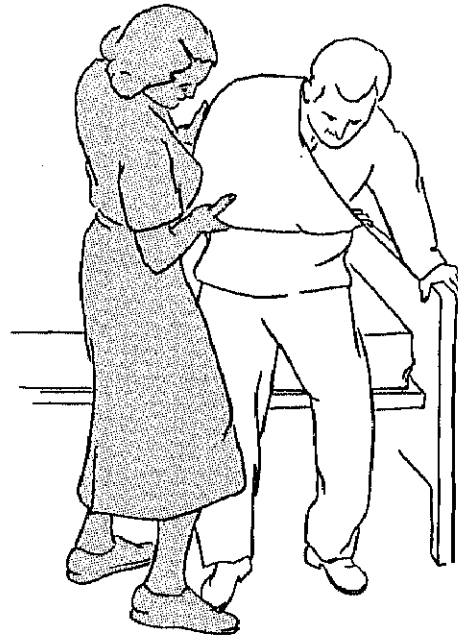


STEP 1

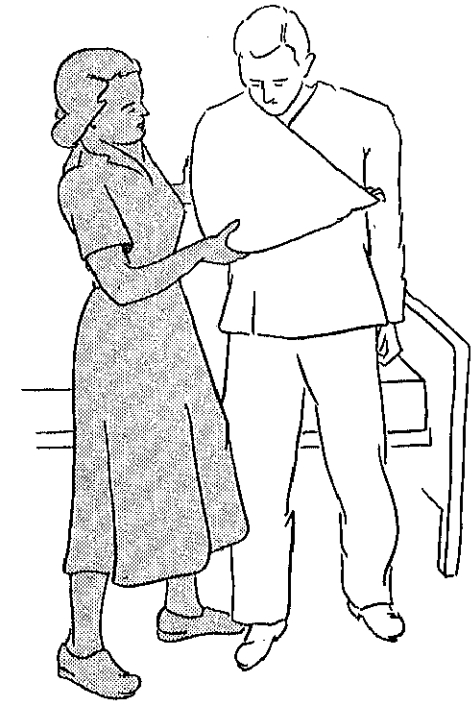
When you are well enough to stand, your doctor will tell you if your weak leg is strong enough to stand on, or if you need a splint or a brace. If your doctor says you can try standing without a splint or a brace, this is how you do it.

Step 1. Sit on the edge of the bed. Make sure that your hips and your body are right over the edge of the bed. Have your helper place a chair next to the bed so that you can put your good hand on the back of the chair. To keep the chair from tilting over, someone should sit on it or put a heavy weight on the seat. If your bed has a rail at the foot end, you can use this instead of a chair.

Have your helper stand next to you on your weak side. The helper should place his foot next to your weak foot and his knee against your weak knee to steady them when you stand up.



STEP 2



STEP 3

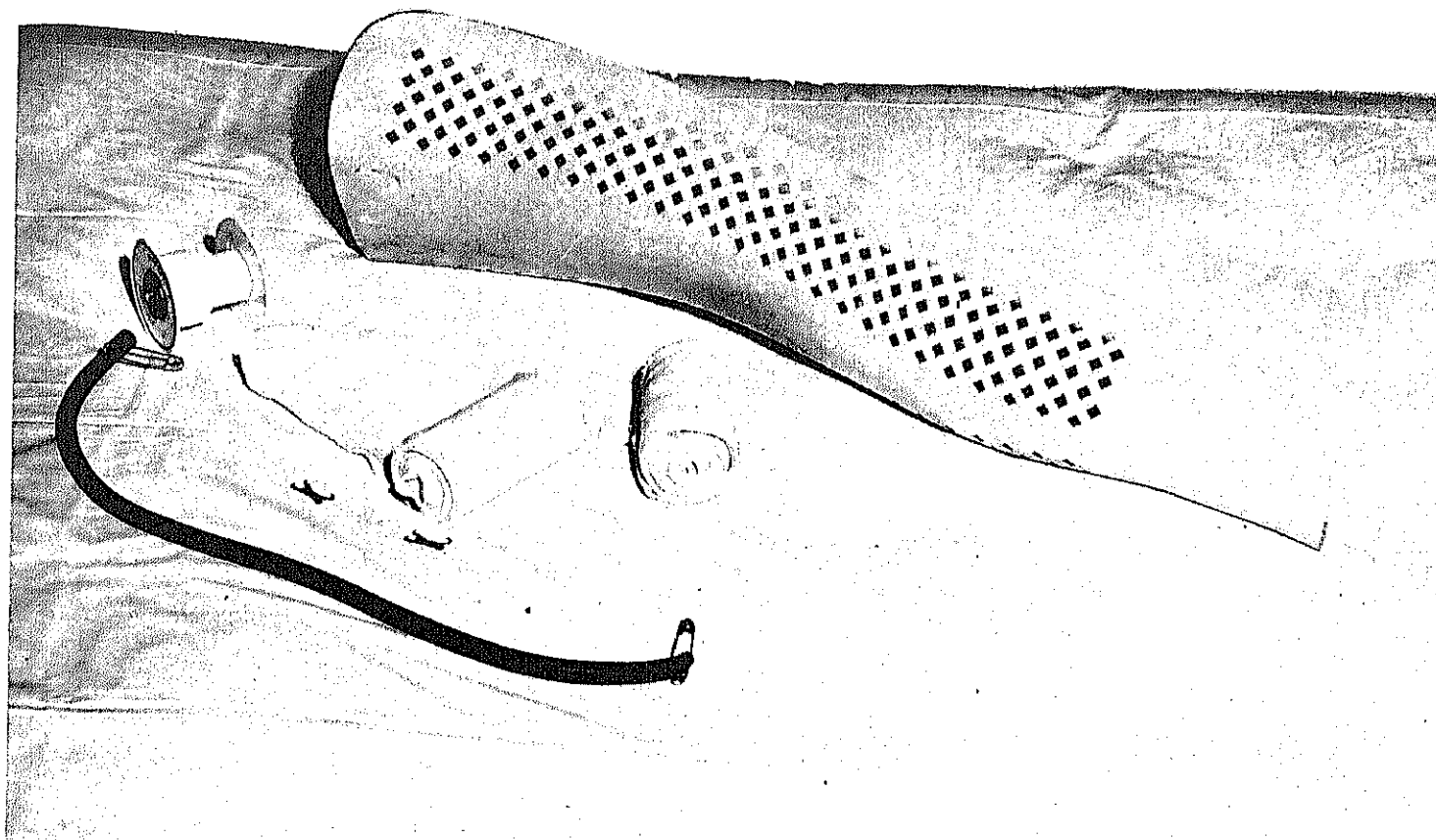
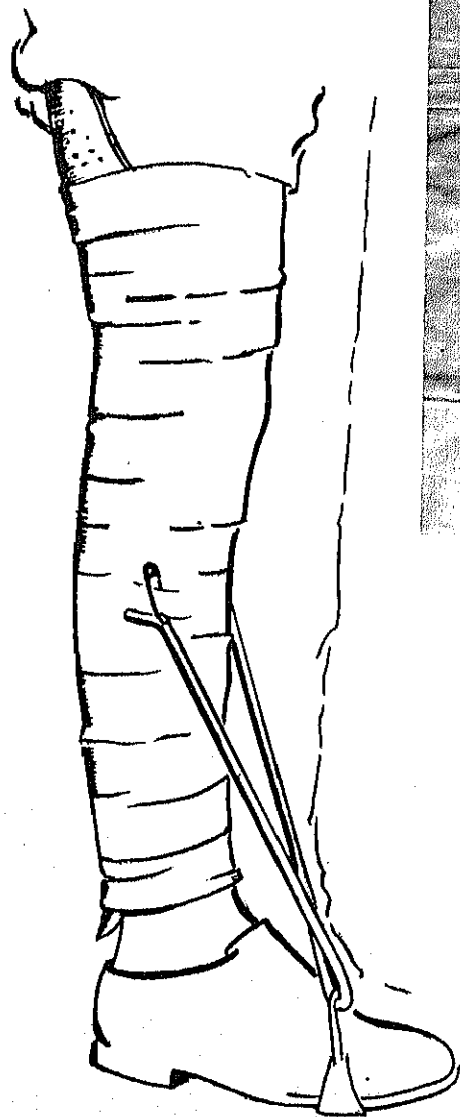
the other hand under the elbow of your weak arm. Place your good foot on the floor right below the edge of the bed.

Step 2. Push down with your good hand on the back of the chair or on the rail of the bed. Lean forward at the same time and straighten the knee of your good foot. This will get you into a standing position.

Your helper should help *only if you need it* by pushing against your knee with his or her knee to keep your knee straight and steady and lifting up under your armpit and elbow.

Step 3. While you are in the standing position, practice standing with and without the support of your helper and then letting go of the chair or bed rail—until you can balance yourself and stand alone without help.

You should then try sitting down by reversing what you did when you stood up.



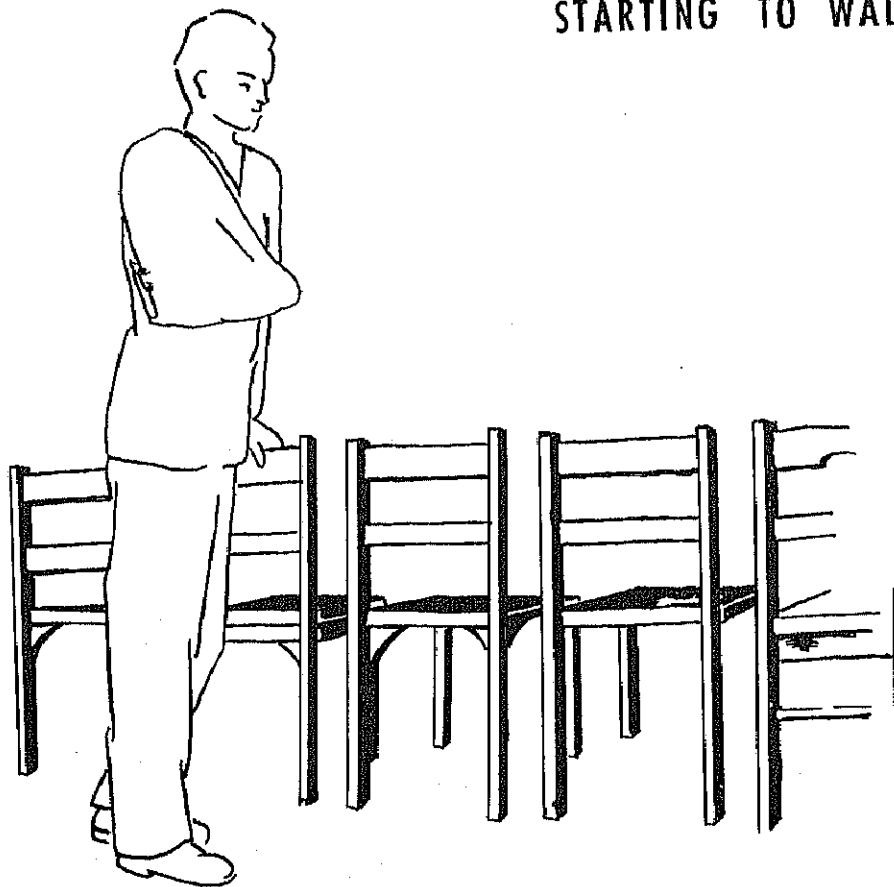
Practice standing up and sitting down until you can do it well and with as little help as possible.

If your leg is too weak to stand on without any support, your doctor may want you to use a splint or a brace.

A splint can be made easily from the things shown in the picture. Your doctor will tell you where to get these things. Your doctor will also show you and your family how to put the splint on.

If you must wear a splint or a brace on your weak leg, you will need to practice standing up and sitting down while you wear the splint or brace.

STARTING TO WALK



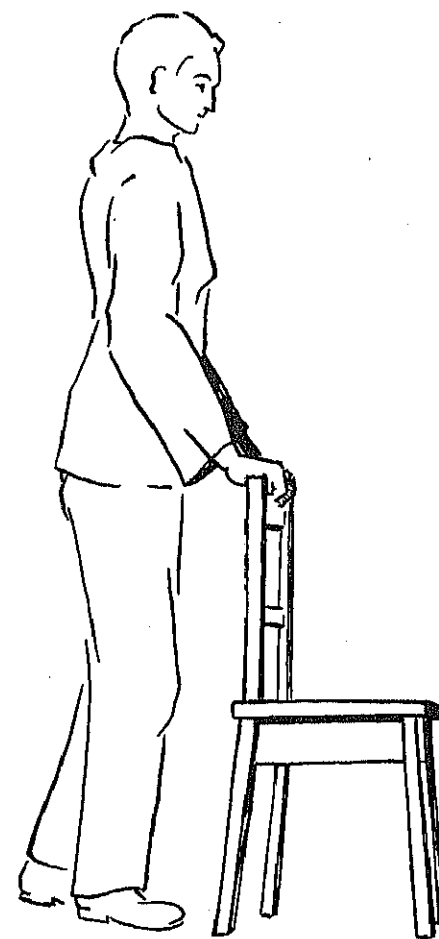
When you are able to stand and keep your balance so that you feel safe, you are ready to start walking.

At first, you may need a steady support to hold on to.

- The backs of chairs lined up in a row, or
- The back of a sofa may be used to give you support while you try walking.

Step 1. Stand on both feet with your feet 3 or 4 inches apart. Place your good hand on the chair or other support just in front of your body.

Step 2. Shift your weight onto your good leg, while you press down on your good hand.



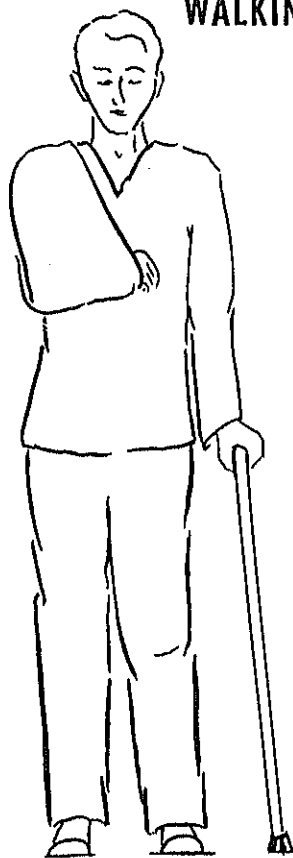
Step 3. Move your weak leg forward about 6 or 8 inches.

Step 4. Now shift your weight onto your weak leg while you hold on with your good hand.

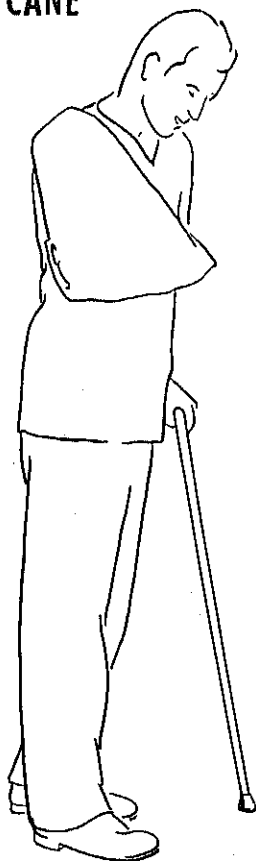
Step 5. Now move your good leg forward 6 or 8 inches and repeat the steps.

If you use a splint, you may need some help to move your weak leg until you learn to do it by yourself.

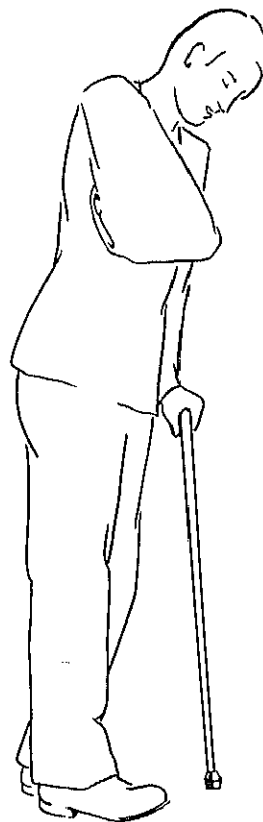
WALKING WITH A CANE



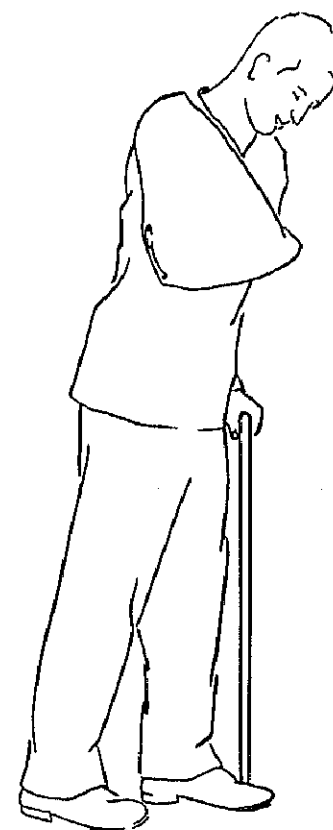
STEP 1



STEP 2



STEP 3



STEP 4

If you need to use a cane to help you walk, be sure it is the right size. The cane should be long enough so that you can hold the handle when your elbow is bent a little. Your cane should have a rubber tip with a wide, flat bottom.

Step 1. Start by standing with your feet 3 or 4 inches apart and toes even. Hold the cane in your good hand. Place the rubber tipped end 6 inches in front and 6 to 8 inches to one side of your feet. Shift your weight onto your good leg and press down on the cane with your good hand.

Step 2. Move your weak leg forward about 6 or 8 inches.

Step 3. Shift your weight onto the weak leg while you press down on the cane with your good hand.

Step 4. Move your good leg forward about 6 or 8 inches. Shift your weight onto your good leg. Move the cane forward about 6 inches in front and to the side of your good foot. Now move the weak leg again and repeat the steps.

THE EXERCISES DESCRIBED IN THIS BOOKLET
SHOULD NOT BE ATTEMPTED WITHOUT THE
SPECIFIC DIRECTION OF A PHYSICIAN.